

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Final 1 Rats

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

C Number: C88006B

Lock Date: 03/26/2004

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

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	7	7	6	7	7	6	7	7	6	7	7	7	7	6	6	7	7	7	7	5	7	7	6	7	
	2	2	8	3	2	2	1	2	0	0	2	3	2	2	6	4	3	2	0	3	8	2	2	1	3
	9	9	8	0	9	4	8	9	3	2	9	0	9	9	0	2	0	9	2	0	7	9	9	8	0
FISCHER 344 RATS MALE																									
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5

males
(cont...)**ALIMENTARY SYSTEM**

Esophagus	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	+	+	+	+	+
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	A	+	+	+	+
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A	+	+	+	+	A	+	+	+	+
Liver	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Leukemia Mononuclear	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mesentery	+	+			+			+									+	+						+
Oral Mucosa																	+							
Pancreas	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Salivary Glands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

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	7	7	6	7	7	6	7	7	6	7	7	7	7	6	6	7	7	7	7	5	7	7	6	7
DAY ON TEST	2	2	8	3	2	2	1	2	0	0	2	3	2	2	6	4	3	2	0	3	8	2	2	1
	9	9	8	0	9	4	8	9	3	2	9	0	9	9	0	2	0	9	2	0	7	9	9	8
FISCHER 344 RATS MALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONTROL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4

**males
(cont...)**

Stomach, Forestomach

+ +

Leiomyosarcoma, Metastatic, Spleen

.....

Stomach, Glandular

+ +

CARDIOVASCULAR SYSTEM

Heart

+ +

ENDOCRINE SYSTEM

Adrenal Cortex

+ +

Adrenal Medulla

+ +

Leukemia Mononuclear

X X

Pheochromocytoma Benign

X X

Pheochromocytoma Malignant

X X

Bilateral, Pheochromocytoma Benign

X

Islets, Pancreatic

+ +

Adenoma

X X

Carcinoma

.....

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|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | |
| | 2 | 2 | 8 | 3 | 2 | 2 | 1 | 2 | 0 | 0 | 2 | 3 | 2 | 2 | 6 | 4 | 3 | 2 | 0 | 3 | 8 | 2 | 2 | 1 | 3 |
| | 9 | 9 | 8 | 0 | 9 | 4 | 8 | 9 | 3 | 2 | 9 | 0 | 9 | 9 | 0 | 2 | 0 | 9 | 2 | 0 | 7 | 9 | 9 | 8 | 0 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

males
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pituitary Gland | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | X |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Penis | | | | | | | | | | | | | | | | | | | | | | | | |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

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| DAY ON TEST | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 2 | 8 | 3 | 2 | 2 | 1 | 2 | 0 | 0 | 2 | 3 | 2 | 2 | 6 | 4 | 3 | 2 | 0 | 3 | 8 | 2 | 2 | 1 |
| | 9 | 9 | 8 | 0 | 9 | 4 | 8 | 9 | 3 | 2 | 9 | 0 | 9 | 9 | 0 | 2 | 0 | 9 | 2 | 0 | 7 | 9 | 9 | 8 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 |

males
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Bilateral, Interstitial Cell, Adenoma | | | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Interstitial Cell, Adenoma | X | X | X | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | + | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Leukemia Mononuclear | X | | X | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Bronchial | M | + | + | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Leukemia Mononuclear | X | X | | X | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Lymph Node, Mediastinal | + | M | M | M | M | M | + | + | + | M | + | + | M | M | M | M | M | M | M | M | M | M | M | |
| Leukemia Mononuclear | | X | | | | | X | | X | | | | | | | | | | | | | | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | X | | X | | X | | X | | X | | X | | X | | X | | X | | X | | X | | X |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

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|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | |
| DAY ON TEST | 2 | 2 | 8 | 3 | 2 | 2 | 1 | 2 | 0 | 0 | 2 | 3 | 2 | 2 | 6 | 4 | 3 | 2 | 0 | 3 | 8 | 2 | 2 | 1 | 3 |
| | 9 | 9 | 8 | 0 | 9 | 4 | 8 | 9 | 3 | 2 | 9 | 0 | 9 | 9 | 0 | 2 | 0 | 9 | 2 | 0 | 7 | 9 | 9 | 8 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**males
(cont...)**

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thymus | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | X | | | | | | | | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibroadenoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | | | | | | X |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | | | | | | | X |
| Subcutaneous Tissue, Fibroma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | |
| Subcutaneous Tissue, Fibrosarcoma | | | | | | | | | | | | | | | | | | | | | | | | X |
| Subcutaneous Tissue, Lipoma | | | | | | | | | | | | | | | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma, Metastatic,
Lung | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

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|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | |
| DAY ON TEST | 2 | 2 | 8 | 3 | 2 | 2 | 1 | 2 | 0 | 0 | 2 | 3 | 2 | 2 | 6 | 4 | 3 | 2 | 0 | 3 | 8 | 2 | 2 | 1 | 3 |
| | 9 | 9 | 8 | 0 | 9 | 4 | 8 | 9 | 3 | 2 | 9 | 0 | 9 | 9 | 0 | 2 | 0 | 9 | 2 | 0 | 7 | 9 | 9 | 8 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**males
(cont...)**

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | X | | | | | | | |
| Medulloblastoma Mal | | | | | | | | | | | | | | | | | | | | | | | | |
| Peripheral Nerve | | | | | | | | | | | | | | | | | | | | | | | | |
| Spinal Cord | | | | | | | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | X | | | | | | | |
| Squamous Cell Carcinoma | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | |
| Pleura | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma, Metastatic,
Lung | | | | | | | | | | | | | | | | | | | | | | | | |

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|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| DAY ON TEST | 7
2
9 | 7
2
9 | 6
8
8 | 7
3
0 | 7
2
4 | 6
9
3 | 7
0
2 | 7
3
9 | 7
2
9 | 7
2
9 | 6
6
0 | 6
4
2 | 7
3
0 | 7
2
9 | 7
3
2 | 5
8
0 | 7
2
9 | 7
2
9 | 6
1
8 | 7
2
0 |
| FISCHER 344 RATS MALE | 0
0
0 | |
| CONTROL | 0
0
1 | 0
0
2 | 0
0
3 | 0
0
4 | 0
0
5 | 0
0
6 | 0
0
7 | 0
0
8 | 0
0
9 | 0
1
0 | 1
1
1 | 1
1
1 | 1
1
1 | 1
1
1 | 1
2
0 | 2
2
1 | 2
2
3 | 2
2
4 | 2
2
5 | |

males
(cont...)

Trachea

+ +

SPECIAL SENSES SYSTEM

Eye

+ + + + + + + + + + + + + + + A + + + + + + + + + + + + + + + + + + +

Harderian Gland

+ +

URINARY SYSTEM

Kidney

+ +

Leukemia Mononuclear

X X X

Urinary Bladder

+ +

Leukemia Mononuclear

SYSTEMIC LESIONS

Multiple Organ

+ +

Histiocytic Sarcoma

X

Leukemia Mononuclear

X X

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 4 | 5 | 7 | 3 | 7 | 6 | 7 | 5 | 7 | 6 | 5 | 6 |
| | 7 | 2 | 3 | 3 | 6 | 8 | 2 | 7 | 3 | 2 | 5 | 3 | 2 | 9 | 2 | 2 | 4 | 2 | 4 | 3 | 9 | 2 | 8 | 4 | 8 |
| | 3 | 9 | 0 | 0 | 6 | 8 | 9 | 1 | 0 | 9 | 4 | 0 | 9 | 5 | 2 | 9 | 5 | 9 | 6 | 0 | 0 | 9 | 1 | 8 | 2 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 48 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | 46 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | A | 46 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | X | X | | X | | X | X | X | X | | X | | X | | X | | X | | X | | X | | X | | 25 |
| Mesentery | + | + | + | + | | | | | | | | | | | | | | | | | | | | | 15 |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 4 | 5 | 7 | 3 | 7 | 6 | 7 | 5 | 7 | 6 | 5 | 6 |
| | 7 | 2 | 3 | 3 | 6 | 8 | 2 | 7 | 3 | 2 | 5 | 3 | 2 | 9 | 2 | 2 | 4 | 2 | 4 | 3 | 9 | 2 | 8 | 4 | 8 |
| | 3 | 9 | 0 | 0 | 6 | 8 | 9 | 1 | 0 | 9 | 4 | 0 | 9 | 5 | 2 | 9 | 5 | 9 | 6 | 0 | 0 | 9 | 1 | 8 | 2 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leiomyosarcoma, Metastatic, Spleen | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Pheochromocytoma Benign | X | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Bilateral, Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Carcinoma | X | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 4 | 5 | 7 | 3 | 7 | 6 | 7 | 5 | 7 | 6 | 5 | 6 | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| | 7 | 2 | 3 | 3 | 6 | 8 | 2 | 7 | 3 | 2 | 5 | 3 | 2 | 9 | 2 | 2 | 4 | 2 | 4 | 3 | 9 | 2 | 8 | 4 | 8 | |
| | 3 | 9 | 0 | 0 | 6 | 8 | 9 | 1 | 0 | 9 | 4 | 0 | 9 | 5 | 2 | 9 | 5 | 9 | 6 | 0 | 0 | 9 | 1 | 8 | 2 | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | 49 | |
| Adenoma | X | X | X | X | X | X | X | X | | | | | | | | | | | X | | X | X | X | | | 34 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | X | | | | | | | | | X | | 3 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| C-cell, Adenoma | X | | | | | | | | | | | | | | | | | | | X | | | | | | 3 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Penis | | | | | | | | | | | | | | | | | | | + | | | | | | | 1 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 4 | 5 | 7 | 3 | 7 | 6 | 7 | 5 | 7 | 6 | 5 | 6 |
|---------------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | 7 | 2 | 3 | 3 | 6 | 8 | 2 | 7 | 3 | 2 | 5 | 3 | 2 | 9 | 2 | 2 | 4 | 2 | 4 | 3 | 9 | 2 | 8 | 4 | 8 |
| | 3 | 9 | 0 | 0 | 6 | 8 | 9 | 1 | 0 | 9 | 4 | 0 | 9 | 5 | 2 | 9 | 5 | 9 | 6 | 0 | 0 | 9 | 1 | 8 | 2 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Bilateral, Interstitial Cell, Adenoma | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 17 |
| Interstitial Cell, Adenoma | X | X | X | | | | X | | | | | | | | | X | X | X | X | X | X | X | X | X | 16 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Lymph Node, Bronchial | M | M | M | + | M | M | M | M | M | M | M | M | M | M | + | M | M | + | M | M | M | M | M | M | 10 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 0 | |
| Lymph Node, Mediastinal | + | M | M | M | M | + | M | M | M | + | M | + | M | M | M | M | M | M | M | M | M | M | M | M | 17 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 9 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | X | X | | | X | | | X | X | X | X | | | | | X | | | X | | X | X | | X | 26 | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

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First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 4 | 5 | 7 | 3 | 7 | 6 | 7 | 5 | 7 | 6 | 5 | 6 |
| | 7 | 2 | 3 | 3 | 6 | 8 | 2 | 7 | 3 | 2 | 5 | 3 | 2 | 9 | 2 | 2 | 4 | 2 | 4 | 3 | 9 | 2 | 8 | 4 | 8 |
| | 3 | 9 | 0 | 0 | 6 | 8 | 9 | 1 | 0 | 9 | 4 | 0 | 9 | 5 | 2 | 9 | 5 | 9 | 6 | 0 | 0 | 9 | 1 | 8 | 2 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Thymus | + | + | + | + | + | + | + | + | + | + | M | + | M | + | + | + | + | M | M | M | + | + | M | + | + | 42 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Fibroadenoma | | X | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Subcutaneous Tissue, Fibroma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Subcutaneous Tissue, Fibrosarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Subcutaneous Tissue, Lipoma | | | | | | | | | | | | X | | | | | | | | | | | | | | 1 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Squamous Cell Carcinoma, Metastatic, Lung | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 4 | 5 | 7 | 3 | 7 | 6 | 7 | 5 | 7 | 6 | 5 | 6 |
| | 7 | 2 | 3 | 3 | 6 | 8 | 2 | 7 | 3 | 2 | 5 | 3 | 2 | 9 | 2 | 2 | 4 | 2 | 4 | 3 | 9 | 2 | 8 | 4 | 8 |
| | 3 | 9 | 0 | 0 | 6 | 8 | 9 | 1 | 0 | 9 | 4 | 0 | 9 | 5 | 2 | 9 | 5 | 9 | 6 | 0 | 0 | 9 | 1 | 8 | 2 |
| DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Medulloblastoma Mal | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Peripheral Nerve | | | | | | | | | | | | | | | + | | | | | | | | | | 1 |
| Spinal Cord | | | | | | | | | | | | | | | + | | | | | | | | | | 1 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | X | X | | | | | | | | | | | | | | | | | | | | | | | 17 | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pleura | | | | | | | | | | | | | | | + | + | | | | | | | | | + | 6 |
| Squamous Cell Carcinoma, Metastatic,
Lung | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 7 | 4 | 5 | 7 | 3 | 7 | 6 | 7 | 5 | 7 | 6 | 5 | 6 |
| | 7 | 2 | 3 | 3 | 6 | 8 | 2 | 7 | 3 | 2 | 5 | 3 | 2 | 9 | 2 | 2 | 4 | 2 | 4 | 3 | 9 | 2 | 8 | 4 | 8 |
| | 3 | 9 | 0 | 0 | 6 | 8 | 9 | 1 | 0 | 9 | 4 | 0 | 9 | 5 | 2 | 9 | 5 | 9 | 6 | 0 | 0 | 9 | 1 | 8 | 2 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|--|--|--|--|--|--|--|--|--|--|---|--|---|--|--|--|--|--|--|--|--|--|--|---|---|
| Leukemia Mononuclear | | | | | | | | | | | X | | X | | | | | | | | | | | X | 6 |
|----------------------|--|--|--|--|--|--|--|--|--|--|---|--|---|--|--|--|--|--|--|--|--|--|--|---|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Leukemia Mononuclear | | | | | | | | | | | X | | | | | | | | | | | | | 1 |
|----------------------|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|---|

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|--|--|---|--|--|--|---|---|---|---|--|--|--|---|--|--|--|---|--|---|--|----|
| Leukemia Mononuclear | X | X | | | X | | | | X | X | X | X | | | | X | | | | X | | X | | 26 |
|----------------------|---|---|--|--|---|--|--|--|---|---|---|---|--|--|--|---|--|--|--|---|--|---|--|----|

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 3 | 3 | 4 | 3 | 3 | 2 | 7 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 8 | 2 | 2 | 3 | 2 | 2 | 1 | 0 | 3 |
| | 9 | 3 | 0 | 6 | 0 | 0 | 9 | 9 | 0 | 7 | 0 | 9 | 3 | 9 | 0 | 9 | 4 | 9 | 9 | 0 | 9 | 9 | 2 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 |

**males
(cont...)**

ALIMENTARY SYSTEM

Esophagus

+ +

Intestine Large, Cecum

+ + + + + + + + + A +

Intestine Large, Colon

+ + + + + + + + + A +

Intestine Large, Rectum

+ +

Intestine Small, Duodenum

+ + + + + + + + + A +

Intestine Small, Ileum

+ + + + + + + + + A +

Intestine Small, Jejunum

+ + + + + + + + + A +

Liver

+ +

Leukemia Mononuclear

X X

Mesentery

+ +

Pancreas

+ +

Salivary Glands

+ +

Stomach, Forestomach

+ +

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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CAS Number: 98-83-9

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | |
| DAY ON TEST | 2 | 3 | 3 | 4 | 3 | 3 | 2 | 7 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 8 | 2 | 2 | 3 | 2 | 2 | 1 | 0 |
| | 9 | 3 | 0 | 6 | 0 | 0 | 9 | 9 | 0 | 7 | 0 | 9 | 3 | 9 | 0 | 9 | 4 | 9 | 9 | 0 | 9 | 9 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |

**males
(cont...)**

Squamous Cell Papilloma

Stomach, Glandular

+ +

Tongue

+

CARDIOVASCULAR SYSTEM

Blood Vessel

+

Heart

+ +

Leukemia Mononuclear

X X

ENDOCRINE SYSTEM

Adrenal Cortex

+ +

Adrenal Medulla

+ +

Leukemia Mononuclear

X X X X

Pheochromocytoma Benign

X X

Pheochromocytoma Malignant

X X

Islets, Pancreatic

+ +

Adenoma

X X

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 7 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | |
| | 2 | 3 | 3 | 4 | 3 | 3 | 2 | 7 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 8 | 2 | 2 | 3 | 2 | 2 | 1 |
| | 9 | 3 | 0 | 6 | 0 | 0 | 9 | 9 | 0 | 7 | 0 | 9 | 3 | 9 | 0 | 9 | 4 | 9 | 9 | 0 | 9 | 9 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 |

males
(cont...)

Adenoma, Multiple

X

Carcinoma

Parathyroid Gland

+ +

Pituitary Gland

+ +

Adenoma

X X

Carcinoma

X

Leukemia Mononuclear

Thyroid Gland

+ +

C-cell, Adenoma

X X

C-cell, Carcinoma

Follicular Cell, Adenoma

GENERAL BODY SYSTEM

Peritoneum

+

Mesothelioma Malignant

Mesothelium, Tunica Vaginalis,
Mesothelioma Malignant

X

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

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Lab: BNW

| DAY ON TEST | 7 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 3 | 3 | 4 | 3 | 3 | 2 | 7 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 8 | 2 | 2 | 3 | 2 | 2 | 1 | 0 | |
| | 9 | 3 | 0 | 6 | 0 | 0 | 9 | 9 | 0 | 7 | 0 | 9 | 3 | 9 | 0 | 9 | 4 | 9 | 9 | 0 | 9 | 9 | 2 | 0 | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Bilateral, Interstitial Cell, Adenoma | X | X | X | X | X | X | | X | | | | | | | | X | X | X | | X | X | X | X | X | |
| Interstitial Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tunic, Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Bronchial | + | M | + | M | M | M | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Lymph Node, Mediastinal | + | M | + | + | M | M | + | M | + | M | + | M | + | M | + | M | + | M | M | M | M | M | M | |
| Leukemia Mononuclear | X | | | | X | | X | | X | | | X | | | | | | | | | | | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | X | | X | X | X | X | X | X | X | X | X |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

males
(cont...)

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Pinna, Neural Crest Tumor | | | | | | | | | | | | | | | | | | | | | | | | |
| Subcutaneous Tissue, Fibrosarcoma | | | | | | | | | | | | | | | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | |
| DAY ON TEST | 2 | 3 | 3 | 4 | 3 | 3 | 2 | 7 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 8 | 2 | 2 | 3 | 2 | 2 | 1 | 0 |
| | 9 | 3 | 0 | 6 | 0 | 0 | 9 | 9 | 0 | 7 | 0 | 9 | 3 | 9 | 0 | 9 | 4 | 9 | 9 | 0 | 9 | 9 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 |
| | | | | | | | | | | | | | | | | | | | | | | | |

males
(cont...)

Intervertebral Disc, Chordoma

Skeletal Muscle

Chordoma, Metastatic, Bone

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma, Metastatic, Pituitary Gland | | | | | | | | | | | | | | | | | | | | | | | | X |
| Glioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Alveolar/Bronchiolar Adenoma | | | | | | | | | | | | | | | | | | | | | | | | X |
| Carcinoma, Metastatic, Preputial Gland | | | | | | | | | | | | | | | | | | | | | | | | X |
| Leukemia Mononuclear | X | X | | | | | | | | X | X | | | | | X | | X | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pleura | | | | | | | | | | + | | + | | + | | + | | + | | + | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 6 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | |
| DAY ON TEST | 2 | 3 | 3 | 4 | 3 | 3 | 2 | 7 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 8 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 0 | 3 |
| | 9 | 3 | 0 | 6 | 0 | 0 | 9 | 9 | 0 | 7 | 0 | 9 | 3 | 9 | 0 | 9 | 4 | 9 | 9 | 0 | 9 | 9 | 2 | 0 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**males
(cont...)**

Trachea

+ +

SPECIAL SENSES SYSTEM

Eye

+ +

Harderian Gland

+ +

Zymbal's Gland

Carcinoma

URINARY SYSTEM

Kidney

+ +

Leukemia Mononuclear

X

X

Urinary Bladder

+ +

SYSTEMIC LESIONS

Multiple Organ

+ +

Leukemia Mononuclear

X X

Mesothelioma Malignant

X

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

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First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 |
| DAY ON TEST | 3 | 3 | 3 | 2 | 2 | 6 | 3 | 3 | 2 | 3 | 0 | 6 | 2 | 2 | 0 | 2 | 6 | 0 | 3 | 8 | 2 | 2 | 2 | 3 |
| | 0 | 0 | 0 | 9 | 6 | 2 | 0 | 0 | 9 | 0 | 5 | 0 | 9 | 9 | 3 | 9 | 3 | 8 | 0 | 4 | 9 | 9 | 4 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | A | + | 47 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | A | + | 47 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 48 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | A | + | 47 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | A | + | 47 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 32 | |
| Mesentery | + | + | | | | | | | | | | | | | | | | | | | | | | 15 | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 |
| DAY ON TEST | 3 | 3 | 3 | 2 | 2 | 6 | 3 | 3 | 2 | 3 | 0 | 6 | 2 | 2 | 0 | 2 | 6 | 0 | 3 | 8 | 2 | 2 | 2 | 3 |
| | 0 | 0 | 0 | 9 | 6 | 2 | 0 | 0 | 9 | 0 | 5 | 0 | 9 | 9 | 3 | 9 | 3 | 8 | 0 | 4 | 9 | 9 | 4 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |

Squamous Cell Papilloma X 1

Stomach, Glandular + 50

Tongue 1

CARDIOVASCULAR SYSTEM

Blood Vessel 1

Heart + 50

Leukemia Mononuclear 2

ENDOCRINE SYSTEM

Adrenal Cortex + 50

Adrenal Medulla + 50

Leukemia Mononuclear X 1

Pheochromocytoma Benign X X X 8

Pheochromocytoma Malignant X 1

Islets, Pancreatic + 50

Adenoma X X X 5

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

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| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 |
| DAY ON TEST | 3 | 3 | 3 | 2 | 2 | 6 | 3 | 3 | 2 | 3 | 0 | 6 | 2 | 2 | 0 | 2 | 6 | 0 | 3 | 8 | 2 | 2 | 2 | 3 |
| | 0 | 0 | 0 | 9 | 6 | 2 | 0 | 0 | 9 | 0 | 5 | 0 | 9 | 9 | 3 | 9 | 3 | 8 | 0 | 4 | 9 | 9 | 4 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

*** TOTALS**

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Adenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| | | | | | | | | | | | | | | | | X | X | | | | | | | | |
| Parathyroid Gland | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Adenoma | X | X | X | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 36 | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | X | | | | | | | | | | | | | | | | 1 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| C-cell, Carcinoma | | | | | | | | | | X | | | | | | | | | | | | | | | 2 |
| Follicular Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

GENERAL BODY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Peritoneum | | | | | | | | | | | | | | | | | | | | | | | | | + | 2 |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Mesothelium, Tunica Vaginalis,
Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
I .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 3 | 3 | 3 | 2 | 2 | 6 | 3 | 3 | 2 | 3 | 0 | 6 | 2 | 2 | 0 | 2 | 6 | 0 | 3 | 8 | 2 | 2 | 2 | 3 |
| | 0 | 0 | 0 | 9 | 6 | 2 | 0 | 0 | 9 | 0 | 5 | 0 | 9 | 9 | 3 | 9 | 3 | 8 | 0 | 4 | 9 | 9 | 4 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | X | | | | 1 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Bilateral, Interstitial Cell, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 31 |
| Interstitial Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | 13 |
| Tunic, Mesothelioma Malignant | | | | | | | X | | X | | | X | X | X | | X | | X | | X | | | | 1 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Lymph Node, Bronchial | M | M | M | M | M | M | + | M | M | + | + | M | M | M | M | M | M | M | M | M | M | M | M | 8 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 3 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| FISCHER 344 RATS MALE
100 PPM | ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | | |
|----------------------------------|-----------|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| | | 3 | 3 | 3 | 2 | 2 | 6 | 3 | 3 | 2 | 3 | 0 | 6 | 2 | 2 | 0 | 2 | 6 | 0 | 3 | 8 | 2 | 2 | 2 | 3 | | |
| | | 0 | 0 | 0 | 9 | 6 | 2 | 0 | 0 | 9 | 0 | 5 | 0 | 9 | 9 | 3 | 9 | 3 | 8 | 0 | 4 | 9 | 9 | 9 | 4 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 2 | |
| Lymph Node, Mediastinal | | + | + | M | + | + | + | M | M | M | M | M | + | + | M | + | + | M | M | + | M | + | M | M | M | 25 | |
| Leukemia Mononuclear | | X | X | X | | | | | | | | | | | | X | X | X | X | X | | | | | | | 12 |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Leukemia Mononuclear | | X | | X | | | | | | | | | | | | X | X | X | X | X | | | | | | | 10 |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | X | X | X | X | X | | | | | | | | | | X | X | X | X | X | | | | | | | 32 |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | 49 | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | 49 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | | | X | | | | 3 |
| Pinna, Neural Crest Tumor | | | | | | | | | | | | | | | | | | | | | X | | | | 1 |
| Subcutaneous Tissue, Fibrosarcoma | | | | | | | | | | | | | | | | | | | | | X | | | | 1 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 |
| DAY ON TEST | 3 | 3 | 3 | 2 | 2 | 6 | 3 | 3 | 2 | 3 | 0 | 6 | 2 | 2 | 0 | 2 | 6 | 0 | 3 | 8 | 2 | 2 | 2 | 3 |
| | 0 | 0 | 0 | 9 | 6 | 2 | 0 | 0 | 9 | 0 | 5 | 0 | 9 | 9 | 3 | 9 | 3 | 8 | 0 | 4 | 9 | 9 | 4 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

*** TOTALS**

Intervertebral Disc, Chordoma X 1

Skeletal Muscle + 1

Chordoma, Metastatic, Bone X 1

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Pituitary Gland | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Glioma Malignant | | | | | | | | | | | | | | | | | | | | | | | 1 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | 49 |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

Alveolar/Bronchiolar Adenoma 1

Carcinoma, Metastatic, Preputial Gland 1

Leukemia Mononuclear 17

| | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Pleura | | | | | | | | | | | | | | | | | | | | | | | 5 |
|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 5 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 7 |
| DAY ON TEST | 3 | 3 | 3 | 2 | 2 | 6 | 3 | 3 | 2 | 3 | 0 | 6 | 2 | 2 | 0 | 2 | 6 | 0 | 3 | 8 | 2 | 2 | 2 | 3 |
| | 0 | 0 | 0 | 9 | 6 | 2 | 0 | 0 | 9 | 0 | 5 | 0 | 9 | 9 | 3 | 9 | 3 | 8 | 0 | 4 | 9 | 9 | 4 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | 49 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | 49 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | X 1 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | X | X | X | X | X | | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 32 |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 2 | 7 | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 8 | 0 | 1 | 3 | 8 | 2 | 2 | 9 | 3 | 0 | 3 | 7 | 5 | 1 | 6 | 3 | 2 | 6 | 8 | 7 | 9 | 1 | 2 |
| | 9 | 4 | 5 | 8 | 0 | 1 | 9 | 9 | 8 | 0 | 8 | 0 | 4 | 6 | 6 | 5 | 0 | 9 | 0 | 8 | 4 | 6 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 |

FISCHER 344 RATS MALE
ANIMAL ID
300 PPM

males
(cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | A | + | + | + | A | + | + |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | A | + | + | + | + | A | + |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | A | + | + | + | A | A | + |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | A | + | + | + | A | A | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | X | | X | | | X | | X | X | X | | | | | | | | X | X | X | X | | | |
| Mesentery | + | | | | | | | | | | | | + | | | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor

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x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 2 | 7 | |
| | 2 | 8 | 0 | 1 | 3 | 8 | 2 | 2 | 9 | 3 | 0 | 3 | 7 | 5 | 1 | 6 | 3 | 2 | 6 | 8 | 7 | 9 | 1 | 2 |
| | 9 | 4 | 5 | 8 | 0 | 1 | 9 | 9 | 8 | 0 | 8 | 0 | 4 | 6 | 6 | 5 | 0 | 9 | 0 | 8 | 4 | 6 | 0 | 0 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 |

males
(cont...)

Stomach, Forestomach

+ + + + + + + + + + + + A + + + + + + + + + + + + + + + +

Stomach, Glandular

+ + + + + + + + + + + + A + + + + + + + + + + + + + + + +

Tooth

+

CARDIOVASCULAR SYSTEM

Blood Vessel

+ +

Heart

+ +

Leukemia Mononuclear

ENDOCRINE SYSTEM

Adrenal Cortex

+ +

Adenoma

Adrenal Medulla

+ +

Ganglioneuroma

X

Leukemia Mononuclear

X X X X X

Pheochromocytoma Benign

X X X X X

Pheochromocytoma Malignant

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 2 | 7 | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 8 | 0 | 1 | 3 | 8 | 2 | 2 | 9 | 3 | 0 | 3 | 7 | 5 | 1 | 6 | 3 | 2 | 6 | 8 | 7 | 9 | 8 | 1 | 2 |
| | 9 | 4 | 5 | 8 | 0 | 1 | 9 | 9 | 8 | 0 | 8 | 0 | 4 | 6 | 6 | 5 | 0 | 9 | 0 | 8 | 4 | 6 | 0 | 0 | 9 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**males
(cont...)**

Bilateral, Pheochromocytoma Benign

Islets, Pancreatic

+ +

Adenoma

X

Carcinoma

X

Parathyroid Gland

+ + + + + + + + + + M +

Pituitary Gland

+ +

Adenoma

X X

Carcinoma

Leukemia Mononuclear

X

Pars Intermedia, Carcinoma

X

Thyroid Gland

+ +

C-cell, Adenoma

X

C-cell, Carcinoma

X

Follicular Cell, Adenoma

Follicular Cell, Carcinoma

X

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 2 | 7 | |
| | 2 | 8 | 0 | 1 | 3 | 8 | 2 | 2 | 9 | 3 | 0 | 3 | 7 | 5 | 1 | 6 | 3 | 2 | 6 | 8 | 7 | 9 | 8 | 1 | 2 |
| | 9 | 4 | 5 | 8 | 0 | 1 | 9 | 9 | 8 | 0 | 8 | 0 | 4 | 6 | 6 | 5 | 0 | 9 | 0 | 8 | 4 | 6 | 0 | 0 | 9 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**males
(cont...)**

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Preputial Gland | | | | | | | | | | | | | | | | | | | | | | | | |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Seminal Vesicle | | | | | | | | | | | | | | | | | | | | | | | | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Bilateral, Interstitial Cell, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Interstitial Cell, Adenoma | X | | | | | | | | | | | | | | | | | | | | | | | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deep Cervical, Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Lumbar, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Bronchial | + | + | M | M | M | M | M | M | M | + | M | M | + | M | M | M | M | + | + | M | M | + | + | M | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

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Species/Strain: RATS/F 344

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First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 2 | 7 | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 8 | 0 | 1 | 3 | 8 | 2 | 2 | 9 | 3 | 0 | 3 | 7 | 5 | 1 | 6 | 3 | 2 | 6 | 8 | 7 | 9 | 1 | 2 |
| | 9 | 4 | 5 | 8 | 0 | 1 | 9 | 9 | 8 | 0 | 8 | 0 | 4 | 6 | 6 | 5 | 0 | 9 | 0 | 8 | 4 | 6 | 0 | 9 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 |

FISCHER 344 RATS MALE

ANIMAL ID

300 PPM

**males
(cont...)**

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | | |
| Lymph Node, Mediastinal | M | M | M | M | M | M | + | M | M | M | M | + | + | M | M | + | M | M | + | + | M | M | M | + | M |
| Leukemia Mononuclear | | | | | | | | | | | | | X | | | | | X | | | | | | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | X | | | | | | | | | | | X | | | | | X | X | | | | | | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | X | | | | | X | | X | X | X | | | | | | X | X | X | X | | | | | |
| Thymus | M | + | + | M | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | X | | | | | | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibroadenoma | | | | | | | | | | | | | | | | | | X | | | | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Basal Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | | | | |
| Sebaceous Gland, Adenoma | | | | | | | | | | | | | | | | | | X | | | | | | |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | X | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

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First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|-------------|
| DAY ON TEST | 7
2
9 | 6
8
4 | 7
0
5 | 6
1
8 | 7
3
9 | 7
2
9 | 6
3
8 | 7
0
8 | 7
3
0 | 6
5
4 | 6
5
6 | 7
5
6 | 5
3
0 | 7
2
9 | 5
6
0 | 6
8
8 | 6
7
4 | 5
9
6 | 6
7
4 | 5
9
6 | 6
8
0 | 2
1
0 | 7
2
9 | |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0
0
4
0
0 | males
(cont...) | |
| 300 PPM | 4
0
1 | 4
0
2 | 4
0
3 | 4
0
4 | 4
0
5 | 4
0
6 | 4
0
7 | 4
0
8 | 4
0
9 | 4
1
0 | 4
1
1 | 4
1
2 | 4
1
3 | 4
1
4 | 4
1
5 | 4
1
6 | 4
1
7 | 4
1
8 | 4
1
9 | 4
2
0 | 4
2
1 | 4
2
2 | 4
2
3 | 4
2
4 |

Subcutaneous Tissue, Lipoma

Subcutaneous Tissue, Schwannoma

Benign

X

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intervertebral Disc, Chordoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skeletal Muscle | | | | | | | | | | | | | | | + | | | | | | | | | | |
| Liposarcoma | | | | | | | | | | | | | | | X | | | | | | | | | | |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma, Metastatic, Pituitary Gland | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spinal Cord | | | | | | | | | | | | | | | | | | | | | | | | | |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

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| .. Insufficient tissue

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 2 | 7 | |
| | 2 | 8 | 0 | 1 | 3 | 8 | 2 | 2 | 9 | 3 | 0 | 3 | 7 | 5 | 1 | 6 | 3 | 2 | 6 | 8 | 7 | 9 | 8 | 1 | 2 |
| | 9 | 4 | 5 | 8 | 0 | 1 | 9 | 9 | 8 | 0 | 8 | 0 | 4 | 6 | 6 | 5 | 0 | 9 | 0 | 8 | 4 | 6 | 0 | 0 | 9 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**males
(cont...)**

Chordoma, Metastatic, Bone

Leukemia Mononuclear

X

X

X

X

X X

Nose

+ +

Pleura

+

+

Trachea

+ +

SPECIAL SENSES SYSTEM

Eye

+ +

Harderian Gland

+ +

Zymbal's Gland

+

Carcinoma

X

URINARY SYSTEM

Kidney

+ +

Leukemia Mononuclear

X

X

Renal Tubule, Adenoma

X

Renal Tubule, Carcinoma

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 6 | 6 | 7 | 5 | 7 | 7 | 5 | 6 | 6 | 5 | 6 | 2 | 7 | |
| | 2 | 8 | 0 | 1 | 3 | 8 | 2 | 2 | 9 | 3 | 0 | 3 | 7 | 5 | 1 | 6 | 3 | 2 | 6 | 8 | 7 | 9 | 8 | 1 | 2 |
| | 9 | 4 | 5 | 8 | 0 | 1 | 9 | 9 | 8 | 0 | 8 | 0 | 4 | 6 | 6 | 5 | 0 | 9 | 0 | 8 | 4 | 6 | 0 | 0 | 9 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

males
(cont...)

Urinary Bladder

+ +

SYSTEMIC LESIONS

Multiple Organ

+ +

Leukemia Mononuclear

X X

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

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| | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 6 |
| | 5 | 3 | 5 | 3 | 2 | 3 | 2 | 2 | 3 | 7 | 2 | 2 | 5 | 2 | 7 | 2 | 8 | 3 | 1 | 4 | 6 |
| | 8 | 0 | 2 | 0 | 9 | 0 | 9 | 9 | 0 | 4 | 9 | 9 | 7 | 9 | 4 | 9 | 8 | 0 | 6 | 9 | 3 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 300 PPM | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | 46 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | X | | | 1 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | 44 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | 44 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 29 |
| Mesentery | | | | | | | | | | | | | | | | | | | | | 8 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 6 |
| | 5 | 3 | 5 | 3 | 2 | 3 | 2 | 2 | 3 | 7 | 2 | 2 | 5 | 2 | 7 | 2 | 8 | 3 | 1 | 4 | 6 |
| | 8 | 0 | 2 | 0 | 9 | 0 | 9 | 9 | 0 | 4 | 9 | 9 | 7 | 9 | 4 | 9 | 8 | 0 | 6 | 9 | 3 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | |
| Tooth | | | | | | | | | | | | | | | | | | | | | 2 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 2 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

Leukemia Mononuclear X 1

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | X | | | | | | | | | 2 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Ganglioneuroma | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | 4 |
| Pheochromocytoma Benign | X | | | | X | X | X | | | | | | | | | | | | | | 9 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | X | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 6 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 5 | 3 | 5 | 3 | 2 | 3 | 2 | 2 | 3 | 7 | 2 | 2 | 5 | 2 | 7 | 2 | 8 | 3 | 1 | 4 | 6 | 1 | 3 | 3 |
| | 8 | 0 | 2 | 0 | 9 | 0 | 9 | 9 | 0 | 4 | 9 | 9 | 7 | 9 | 4 | 9 | 8 | 0 | 6 | 9 | 3 | 8 | 0 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | |
|------------------------------------|---|---|
| Bilateral, Pheochromocytoma Benign | X | 1 |
|------------------------------------|---|---|

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Parathyroid Gland | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | 49 |
| Adenoma | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | X | X | X | | 34 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pars Intermedia, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Follicular Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Follicular Cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
| .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 6 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 5 | 3 | 5 | 3 | 2 | 3 | 2 | 2 | 3 | 7 | 2 | 2 | 5 | 2 | 7 | 2 | 8 | 3 | 1 | 4 | 6 | 1 | 3 | 3 |
| | 8 | 0 | 2 | 0 | 9 | 0 | 9 | 9 | 0 | 4 | 9 | 9 | 7 | 9 | 4 | 9 | 8 | 0 | 6 | 9 | 3 | 8 | 0 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Bilateral, Interstitial Cell, Adenoma | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 23 |
| Interstitial Cell, Adenoma | X | X | | | X | X | | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | 18 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Deep Cervical, Leukemia Mononuclear | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 1 |
| Lumbar, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| Lymph Node, Bronchial | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 14 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 4 |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
| .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 6 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 5 | 3 | 5 | 3 | 2 | 3 | 2 | 2 | 3 | 7 | 2 | 2 | 5 | 2 | 7 | 2 | 8 | 3 | 1 | 4 | 6 | 1 | 3 | 3 |
| | 8 | 0 | 2 | 0 | 9 | 0 | 9 | 9 | 0 | 4 | 9 | 9 | 7 | 9 | 4 | 9 | 8 | 0 | 6 | 9 | 3 | 8 | 0 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 1 |
| Lymph Node, Mediastinal | M | M | + | + | + | + | + | M | M | M | M | M | M | + | + | M | + | + | + | M | + | + | M | 20 |
| Leukemia Mononuclear | | | X | X | X | | | | X | X | X | X | X | X | | X | | X | | X | | X | | 10 |
| Lymph Node, Mesenteric | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leukemia Mononuclear | X | X | | | | X | X | X | X | X | X | X | X | X | | | | | | | | | | 10 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leukemia Mononuclear | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 29 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 1 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibroadenoma | | | X | | | | | | | | | | | | | | | | X | | | | | 3 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | X | | | | | 1 |
| Basal Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Sebaceous Gland, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | | X | | | | | 4 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 6 |
| | 5 | 3 | 5 | 3 | 2 | 3 | 2 | 2 | 3 | 7 | 2 | 2 | 5 | 2 | 7 | 2 | 8 | 3 | 1 | 4 | 6 |
| | 8 | 0 | 2 | 0 | 9 | 0 | 9 | 9 | 0 | 4 | 9 | 9 | 7 | 9 | 4 | 9 | 8 | 0 | 6 | 9 | 3 |
| | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | |

| | | |
|---------------------------------|---|---|
| Subcutaneous Tissue, Lipoma | X | 1 |
| Subcutaneous Tissue, Schwannoma | | |
| Benign | | 1 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intervertebral Disc, Chordoma | | | | | | | | | | | | | | | | | X | | | | 1 |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | 1 |
| Liposarcoma | | | | | | | | | | | | | | | | | | | | | 1 |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Pituitary Gland | | | | | | | | | | | | | | | | | | X | | | 1 |
| Spinal Cord | | | | | | | | | | | | | | | | | | | + | | 1 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

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Lab: BNW

| DAY ON TEST | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 6 | |
|-----------------------|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS MALE | 5 | 3 | 5 | 3 | 2 | 3 | 2 | 2 | 3 | 7 | 2 | 2 | 5 | 2 | 7 | 2 | 8 | 3 | 1 | 4 | 6 | 1 | 3 | 3 |
| ANIMAL ID | 8 | 0 | 2 | 0 | 9 | 0 | 9 | 9 | 0 | 4 | 9 | 9 | 7 | 9 | 4 | 9 | 8 | 0 | 6 | 9 | 3 | 8 | 0 | 0 |
| 300 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Chordoma, Metastatic, Bone | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 1 |
| Leukemia Mononuclear | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 21 |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Pleura | + | + | | | | | | | | | | | | | | | | | | | | | | | 6 |
|--------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | | + | 2 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 | |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | X | 4 |
|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Renal Tubule, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Renal Tubule, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 5 | 6 | 7 | 7 | 6 | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 5 | 3 | 5 | 3 | 2 | 3 | 2 | 2 | 3 | 7 | 2 | 2 | 5 | 2 | 7 | 2 | 8 | 3 | 1 | 4 | 6 | 1 | 3 | 3 |
| | 8 | 0 | 2 | 0 | 9 | 0 | 9 | 9 | 0 | 4 | 9 | 9 | 7 | 9 | 4 | 9 | 8 | 0 | 6 | 9 | 3 | 8 | 0 | 0 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

Urinary Bladder

+ 50

SYSTEMIC LESIONS

Multiple Organ

+ 50

Leukemia Mononuclear

X 29

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 5 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 5 | 7 | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--------------------|
| | 3 | 8 | 2 | 3 | 0 | 3 | 8 | 6 | 5 | 3 | 6 | 0 | 3 | 0 | 2 | 2 | 2 | 2 | 6 | 3 | 6 | 1 | 6 | 0 | 5 | 0 |
| | 0 | 6 | 2 | 0 | 9 | 0 | 8 | 2 | 3 | 0 | 2 | 1 | 0 | 2 | 9 | 9 | 9 | 9 | 9 | 0 | 5 | 4 | 8 | 2 | 8 | 9 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | males
(cont...) |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma, Metastatic, Kidney | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa | | | | | | | + | | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 5 | 7 | |
| DAY ON TEST | 3 | 8 | 2 | 3 | 0 | 3 | 8 | 6 | 5 | 3 | 6 | 0 | 3 | 0 | 2 | 2 | 2 | 2 | 6 | 3 | 6 | 1 | 6 | 0 | 5 | 0 |
| | 0 | 6 | 2 | 0 | 9 | 0 | 8 | 2 | 3 | 0 | 2 | 1 | 0 | 2 | 9 | 9 | 9 | 9 | 0 | 5 | 4 | 8 | 2 | 8 | 9 | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

males
(cont...)

Salivary Glands

+ +

Stomach, Forestomach

+ X

Leukemia Mononuclear

Stomach, Glandular

+ +

Tongue

+

CARDIOVASCULAR SYSTEM

Heart

+ +

Leukemia Mononuclear

ENDOCRINE SYSTEM

Adrenal Cortex

+ +

Adrenal Medulla

+ +

Leukemia Mononuclear

X X X X

Pheochromocytoma Benign

X X X X

Pheochromocytoma Complex

X X X X

Pheochromocytoma Malignant

X X X X

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 5 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 5 | 7 |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 8 | 2 | 3 | 0 | 3 | 8 | 6 | 5 | 3 | 6 | 0 | 3 | 0 | 2 | 2 | 2 | 6 | 3 | 6 | 1 | 6 | 0 | 5 | 0 |
| | 0 | 6 | 2 | 0 | 9 | 0 | 8 | 2 | 3 | 0 | 2 | 1 | 0 | 2 | 9 | 9 | 9 | 9 | 0 | 5 | 4 | 8 | 2 | 8 | 9 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**males
(cont...)**

Islets, Pancreatic

+ +

Adenoma

Carcinoma

Parathyroid Gland

+ + + + + + + + M + + + + + + M + + + + + + + + + + + + +

Pituitary Gland

+ +

Adenoma

X X X X X X X X X X X X X X X X X X

Leukemia Mononuclear

Thyroid Gland

+ +

Carcinoma, Metastatic, Kidney

C-cell, Adenoma

Follicular Cell, Adenoma

Follicular Cell, Carcinoma

X

X

GENERAL BODY SYSTEM

Peritoneum

+

Mesothelioma Malignant

X

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 5 | 7 | |
| | 3 | 8 | 2 | 3 | 0 | 3 | 8 | 6 | 5 | 3 | 6 | 0 | 3 | 0 | 2 | 2 | 2 | 2 | 6 | 3 | 6 | 1 | 6 | 0 | 5 | 0 |
| | 0 | 6 | 2 | 0 | 9 | 0 | 8 | 2 | 3 | 0 | 2 | 1 | 0 | 2 | 9 | 9 | 9 | 9 | 0 | 5 | 4 | 8 | 2 | 8 | 9 | |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1000 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

**males
(cont...)**

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Bilateral, Interstitial Cell, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Interstitial Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tunic, Mesothelioma Malignant | | | | | | | X | | | X | | | | | | | | | | | | | | X | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma, Metastatic, Kidney | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node | | | | | | | | | | + | | | | | | | | | | | | | | | |
| Deep Cervical, Carcinoma, Metastatic,
Kidney | | | | | | | | | | | | | | | | | | | | | | | | | |
| Deep Cervical, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| DAY ON TEST | 7
3
0 | 5
8
6 | 7
2
2 | 7
3
0 | 7
3
8 | 6
6
2 | 5
5
2 | 6
3
1 | 7
0
0 | 7
2
2 | 7
2
9 | 7
6
9 | 6
3
9 | 7
3
0 | 5
5
5 | 5
1
4 | 7
6
8 | 6
0
2 | 7
0
8 | 5
5
9 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|

FISCHER 344 RATS MALE

ANIMAL ID

1000 PPM

males
(cont...)

| | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lymph Node, Bronchial | M | M | + | + | + | + | M | + | + | M | M | + | M | + | M | M | + | M | M | M |
| Leukemia Mononuclear | | | | | | | X | | X | | | | | | | | | | | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M |
| Lymph Node, Mediastinal | + | M | M | M | M | M | M | + | + | M | M | M | M | M | M | M | M | M | M | M |
| Carcinoma, Metastatic, Kidney | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | X | X |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | X | X | | | | | X | X | | | | | | | | | X | X | X | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Thymus | + | + | + | M | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | |

INTEGUMENTARY SYSTEM

Mammary Gland

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Fibroadenoma

| |
|---|
| X |
|---|

Fibroadenoma, Multiple

| |
|---|
| X |
|---|

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 5 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 5 | 7 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 8 | 2 | 3 | 0 | 3 | 8 | 6 | 5 | 3 | 6 | 0 | 3 | 0 | 2 | 2 | 2 | 6 | 3 | 6 | 1 | 6 | 0 | 5 | 0 |
| | 0 | 6 | 2 | 0 | 9 | 0 | 8 | 2 | 3 | 0 | 2 | 1 | 0 | 2 | 9 | 9 | 9 | 9 | 0 | 5 | 4 | 8 | 2 | 8 | 9 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**males
(cont...)**

Skin +

Basal Cell Carcinoma

X

Keratoacanthoma

Squamous Cell Carcinoma

Subcutaneous Tissue, Fibroma

X

X

X

MUSCULOSKELETAL SYSTEM

Bone +

NERVOUS SYSTEM

Brain +

RESPIRATORY SYSTEM

Larynx +

Lung +

Carcinoma, Metastatic, Kidney

X

Leukemia Mononuclear

X X X

X X

X

X X

X X

X

X X X

Nose +

Leukemia Mononuclear

X

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 7
3
0 | 5
8
6 | 7
2
0 | 7
3
0 | 7
3
0 | 6
8
0 | 5
6
2 | 6
5
3 | 7
6
0 | 5
3
2 | 7
0
2 | 7
2
2 | 7
2
2 | 6
6
9 | 7
3
9 | 5
6
9 | 5
1
0 | 7
6
8 | 6
6
8 | 7
0
2 | 5
5
9 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0
0
6
0
1 | 0
0
6
0
2 | 0
0
6
0
3 | 0
0
6
0
5 | 0
0
6
0
6 | 0
0
6
0
7 | 0
0
6
0
8 | 0
0
6
0
9 |
| 1000 PPM | 0
0
1 | 0
0
2 | 0
0
3 | 0
0
4 | 0
0
5 | 0
0
6 | 0
0
7 | 0
0
8 | 0
0
9 | 0
0
0 | 1
1
1 | 1
1
1 | 1
1
1 | 1
1
1 | 1
1
1 | 1
1
1 | 2
2
2 | 2
2
2 | 2
2
2 | 2
2
2 | males
(cont...) |

Pleura + +

Trachea +

SPECIAL SENSES SYSTEM

Eye +

Harderian Gland +

Zymbal's Gland + + +

Adenoma X

Carcinoma X

URINARY SYSTEM

Kidney +

Leukemia Mononuclear X X

Renal Tubule, Carcinoma X

Urinary Bladder +

SYSTEMIC LESIONS

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

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P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 7 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 5 | 7 | 6 | 7 | 5 | 7 |
| DAY ON TEST | 3 | 8 | 2 | 3 | 0 | 3 | 8 | 6 | 5 | 3 | 6 | 0 | 3 | 0 | 2 | 2 | 2 | 6 | 3 | 6 | 1 | 6 | 0 | 5 | 0 |
| | 0 | 6 | 2 | 0 | 9 | 0 | 8 | 2 | 3 | 0 | 2 | 1 | 0 | 2 | 9 | 9 | 9 | 9 | 0 | 5 | 4 | 8 | 2 | 8 | 9 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**males
(cont...)**

Multiple Organ

Leukemia Mononuclear

Mesothelioma Malignant

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 5 | 7 | 4 | 6 | 2 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 6 | 3 | 6 | 7 | 7 | 7 | 7 | 7 | 5 |
| | 2 | 5 | 1 | 3 | 0 | 8 | 0 | 3 | 2 | 3 | 2 | 4 | 3 | 8 | 6 | 3 | 2 | 6 | 0 | 2 | 3 | 3 | 2 | 2 |
| | 9 | 6 | 9 | 0 | 1 | 4 | 0 | 0 | 9 | 0 | 9 | 6 | 0 | 8 | 0 | 0 | 8 | 7 | 0 | 9 | 0 | 0 | 9 | 9 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | 47 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | 48 | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | 48 | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | 47 | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | 47 | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | 47 | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Kidney | | | | | | | | | | | | | | | | X | | | | | | | | 1 |
| Leukemia Mononuclear | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 38 |
| Mesentery | | | | | | | | | | | | | | | + | + | | | | | | | | 5 |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 6 | 5 | 7 | 4 | 6 | 2 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 6 | 3 | 6 | 7 | 7 | 7 | 7 | 7 | 5 |
| DAY ON TEST | 2 | 5 | 1 | 3 | 0 | 8 | 0 | 3 | 2 | 3 | 2 | 4 | 3 | 8 | 6 | 3 | 2 | 6 | 0 | 2 | 3 | 3 | 2 | 2 |
| | 9 | 6 | 9 | 0 | 1 | 4 | 0 | 0 | 9 | 0 | 9 | 6 | 0 | 8 | 0 | 0 | 8 | 7 | 0 | 9 | 0 | 0 | 9 | 9 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | 1 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 1 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| Pheochromocytoma Benign | | | | | X | | | | X | X | | | X | | | | | | | | | | | 6 |
| Pheochromocytoma Complex | | | | | | | | | | | | | | X | | | | | | | | | | 1 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 6 | 5 | 7 | 4 | 6 | 2 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 6 | 3 | 6 | 7 | 7 | 7 | 7 | 5 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 5 | 1 | 3 | 0 | 8 | 0 | 3 | 2 | 3 | 2 | 4 | 3 | 8 | 6 | 3 | 2 | 6 | 0 | 2 | 3 | 3 | 2 | 2 |
| | 9 | 6 | 9 | 0 | 1 | 4 | 0 | 0 | 9 | 0 | 9 | 6 | 0 | 8 | 0 | 0 | 8 | 7 | 0 | 9 | 0 | 0 | 9 | 9 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

*** TOTALS**

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 24 |
| Leukemia Mononuclear | | | | | | | X | | | | | | | | | | | | | | | | | 1 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Kidney | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Follicular Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Follicular Cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 2 |

GENERAL BODY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Peritoneum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 3 |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | | | | | 3 |

GENITAL SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
| .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

TDMS No. 88006 - 03

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Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| | 7 | 6 | 5 | 7 | 4 | 6 | 2 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 6 | 3 | 6 | 7 | 7 | 7 | 7 | 7 | 5 |
| | 2 | 5 | 1 | 3 | 0 | 8 | 0 | 3 | 2 | 3 | 2 | 4 | 3 | 8 | 6 | 3 | 2 | 6 | 0 | 2 | 3 | 3 | 2 | 2 |
| | 9 | 6 | 9 | 0 | 1 | 4 | 0 | 0 | 9 | 0 | 9 | 6 | 0 | 8 | 0 | 0 | 8 | 7 | 0 | 9 | 0 | 0 | 9 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | X | | | | | | | | 1 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Prostate | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Bilateral, Interstitial Cell, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 38 |
| Interstitial Cell, Adenoma | | | | | | X | | | | | | | | | | X | | | | | | | | 6 |
| Tunic, Mesothelioma Malignant | | | | | | | | | | | | | | | | X | | | | | | | | 3 |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma, Metastatic, Kidney | | | | | | | | | | | | | | | | X | | | | | | | | 1 |
| Lymph Node | | | | | | | | | | | | | | | | + | + | + | + | + | + | + | + | 12 |
| Deep Cervical, Carcinoma, Metastatic, Kidney | | | | | | | | | | | | | | | | X | | | | | | | | 1 |
| Deep Cervical, Leukemia Mononuclear | | | | | | | | | | | | | | | | | X | | | | | | | 4 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | X | X | X | X | X | | | | 9 | |
| Renal, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 5 | 7 | 4 | 6 | 2 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 6 | 3 | 6 | 7 | 7 | 7 | 7 | 7 | 5 |
| | 2 | 5 | 1 | 3 | 0 | 8 | 0 | 3 | 2 | 3 | 2 | 4 | 3 | 8 | 6 | 3 | 2 | 6 | 0 | 2 | 3 | 3 | 2 | 2 |
| | 9 | 6 | 9 | 0 | 1 | 4 | 0 | 0 | 9 | 0 | 9 | 6 | 0 | 8 | 0 | 0 | 8 | 7 | 0 | 9 | 0 | 0 | 9 | 9 |
| FISCHER 344 RATS MALE | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Lymph Node, Bronchial | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 15 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 0 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mediastinal | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 18 | |
| Carcinoma, Metastatic, Kidney | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | X | | | | | | | | | | | | | | | | | | | | | | 9 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | X | X | | | | | | | | | | | | | | | | | | | | | 17 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 38 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Leukemia Mononuclear | | | X | | | | | | | | | | | | | | | | | | | | | 1 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Fibroadenoma | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| | 7 | 6 | 5 | 7 | 4 | 6 | 2 | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 6 | 3 | 6 | 7 | 7 | 7 | 7 | 7 | 5 | |
| | 2 | 5 | 1 | 3 | 0 | 8 | 0 | 3 | 2 | 3 | 2 | 4 | 3 | 8 | 6 | 3 | 2 | 6 | 0 | 2 | 3 | 3 | 2 | 2 | 7 | |
| | 9 | 6 | 9 | 0 | 1 | 4 | 0 | 0 | 9 | 0 | 9 | 6 | 0 | 8 | 0 | 0 | 8 | 7 | 0 | 9 | 0 | 0 | 9 | 9 | 9 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Basal Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | X | | | | | 1 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | X | | | | | | | | | 2 |
| Squamous Cell Carcinoma | | X | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Subcutaneous Tissue, Fibroma | | X | | | | | | | | | | | | | | | | | | | | | | | | 4 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Carcinoma, Metastatic, Kidney | | | | | | | | | | | | | | | | | X | | | | | | | | | 2 |
| Leukemia Mononuclear | | X | X | X | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 28 | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | 49 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

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|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|
| | 7 | 6 | 5 | 7 | 4 | 6 | 2 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 6 | 3 | 6 | 7 | 7 | 7 | 7 | 7 | 5 |
| | 2 | 5 | 1 | 3 | 0 | 8 | 0 | 3 | 2 | 3 | 2 | 4 | 3 | 8 | 6 | 3 | 2 | 6 | 0 | 2 | 3 | 3 | 2 | 2 |
| | 9 | 6 | 9 | 0 | 1 | 4 | 0 | 0 | 9 | 0 | 9 | 6 | 0 | 8 | 0 | 0 | 8 | 7 | 0 | 9 | 0 | 0 | 9 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Pleura | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 5 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | 49 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Zymbal's Gland | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | X | | | | | X | X | X | X | | | | | | | X | | 12 |
| Renal Tubule, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SYSTEMIC LESIONS

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
| .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

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|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 6 | 5 | 7 | 4 | 6 | 2 | 7 | 7 | 7 | 6 | 7 | 6 | 6 | 7 | 6 | 3 | 6 | 7 | 7 | 7 | 7 | 7 | 5 |
| DAY ON TEST | 2 | 5 | 1 | 3 | 0 | 8 | 0 | 3 | 2 | 3 | 2 | 4 | 3 | 8 | 6 | 3 | 2 | 6 | 0 | 2 | 3 | 3 | 2 | 2 |
| | 9 | 6 | 9 | 0 | 1 | 4 | 0 | 0 | 9 | 0 | 9 | 6 | 0 | 8 | 0 | 0 | 8 | 7 | 0 | 9 | 0 | 0 | 9 | 9 |
| FISCHER 344 RATS MALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

Multiple Organ

+ 50

Leukemia Mononuclear

X 38

Mesothelioma Malignant

X 3

*** END OF MALE DATA ***

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 6 | 0 | 7 | 7 | 7 | 6 | 7 | 7 | 5 | 4 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | |
| 1 | 3 | 3 | 8 | 6 | 3 | 3 | 8 | 1 | 2 | 3 | 3 | 6 | 3 | 3 | 2 | 6 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 1 | 3 |
| 8 | 2 | 1 | 8 | 8 | 1 | 2 | 7 | 6 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 0 | 2 | 1 | 2 | 0 | 9 | 1 | 8 | 2 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | A | + | A | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Colon | + | + | + | + | + | + | + | A | + | A | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | A | + | A | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | A | + | A | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | A | + | A | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | X | | X | X | | X | X | | X | | X | | X | | X | | X | | X | | X | X | | X | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | + | + | + | | | | + | + | + | | | | + | | | | | | | | + | | | | | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

l .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 6 | 0 | 7 | 7 | 7 | 6 | 7 | 7 | 5 | 4 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | |
| DAY ON TEST | 1 | 3 | 3 | 8 | 6 | 3 | 3 | 8 | 1 | 2 | 3 | 3 | 6 | 3 | 3 | 2 | 6 | 3 | 3 | 3 | 3 | 7 | 3 | 1 | 3 |
| | 8 | 2 | 1 | 8 | 8 | 1 | 2 | 7 | 6 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 0 | 2 | 1 | 2 | 0 | 9 | 1 | 8 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

Stomach, Forestomach

+ +

Stomach, Glandular

+ + + + + + + A +

Leukemia Mononuclear

CARDIOVASCULAR SYSTEM

Heart +

Leukemia Mononuclear

ENDOCRINE SYSTEM

Adrenal Cortex +

Adenoma X

Adrenal Medulla +

Leukemia Mononuclear

Pheochromocytoma Benign X

Islets, Pancreatic +

Adenoma X

Parathyroid Gland + + + M + + + M + M

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 6 | 0 | 7 | 7 | 7 | 6 | 7 | 7 | 5 | 4 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | |
| DAY ON TEST | 1 | 3 | 3 | 8 | 6 | 3 | 3 | 8 | 1 | 2 | 3 | 3 | 6 | 3 | 3 | 2 | 6 | 3 | 3 | 3 | 3 | 7 | 3 | 1 | 3 |
| | 8 | 2 | 1 | 8 | 8 | 1 | 2 | 7 | 6 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 0 | 2 | 1 | 2 | 0 | 9 | 1 | 8 | 2 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| Leukemia Mononuclear | | | | | | X | | | | | | | | | | | | | | | | | | | | | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | X | | | | | | | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibrosarcoma | | | | | | | | | | | | | | | | | | | X | | | | | | | | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Granulosa Cell Tumor Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | X | | | | | | | | |
| Serosa, Hemangioma | | | | | | | | | | | | | | | | | | | X | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

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First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 6 | 0 | 7 | 7 | 7 | 6 | 7 | 7 | 5 | 4 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | |
| 1 | 3 | 3 | 8 | 6 | 3 | 3 | 8 | 1 | 2 | 3 | 3 | 6 | 3 | 3 | 2 | 6 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 1 | 3 |
| 8 | 2 | 1 | 8 | 8 | 1 | 2 | 7 | 6 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 0 | 2 | 1 | 2 | 0 | 9 | 1 | 8 | 2 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Bronchial | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mediastinal | M | M | M | + | + | M | + | + | + | + | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | |
| Leukemia Mononuclear | | | | X | | | X | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | X | | | X | X | | X | X | | | | | | | | | | | | | X | X | |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 6 | 0 | 7 | 7 | 7 | 6 | 7 | 7 | 5 | 4 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | |
| 1 | 3 | 3 | 3 | 8 | 6 | 3 | 3 | 8 | 1 | 2 | 3 | 3 | 6 | 3 | 3 | 2 | 6 | 3 | 3 | 3 | 3 | 7 | 3 | 1 | 3 |
| 8 | 2 | 1 | 8 | 8 | 1 | 2 | 7 | 6 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 0 | 2 | 1 | 2 | 0 | 9 | 1 | 8 | 2 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

Thymoma Benign

X

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Carcinoma | X | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Fibroadenoma | | | | | | X | X | | | X | X | | X | | | | | | | X | X | | | | | | |
| Fibroadenoma, Multiple | | X | | | | | | X | | | | X | | | X | X | | | | | | | | | | X | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | X | | | | | | | | | | | | |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Rhabdomyosarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Astrocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

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| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 6 | 0 | 7 | 7 | 7 | 6 | 7 | 7 | 5 | 4 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | |
| DAY ON TEST | 1 | 3 | 3 | 8 | 6 | 3 | 3 | 8 | 1 | 2 | 3 | 3 | 6 | 3 | 3 | 2 | 6 | 3 | 3 | 3 | 3 | 7 | 3 | 1 | 3 |
| | 8 | 2 | 1 | 8 | 8 | 1 | 2 | 7 | 6 | 2 | 1 | 1 | 2 | 2 | 1 | 0 | 2 | 1 | 2 | 0 | 9 | 1 | 8 | 2 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

Glioma Malignant

X

Leukemia Mononuclear

X

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | X | | | | | | | | | | | | | | | | | | | | X | X | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pleura | | | | | | | | | | | | | | | | | | | | | | | | | + |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

URINARY SYSTEM

| | |
|---|---------------------------------------|
| * .. Total animals with tissue examined microscopically; Total animals with tumor | M .. Missing tissue |
| + .. Tissue examined microscopically | A .. Autolysis precludes evaluation |
| x .. Lesion present | BLANK .. Not examined microscopically |
| .. Insufficient tissue | |

TDMS No. 88006 - 03

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CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 6 | 7 | 7 | 6 | 5 | 7 | 7 | 6 | 0 | 7 | 7 | 7 | 6 | 7 | 7 | 5 | 4 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 3 | 3 | 8 | 6 | 3 | 3 | 8 | 1 | 2 | 3 | 3 | 6 | 3 | 3 | 2 | 6 | 3 | 3 | 3 | 3 | 3 | 7 | 3 | 1 | 3 |
| | 8 | 2 | 1 | 8 | 8 | 1 | 2 | 7 | 6 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 0 | 2 | 1 | 2 | 0 | 9 | 1 | 8 | 2 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | X | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Ureter | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | X | | X | X | | X | X | | | X | | | X | | | X | | X | X | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 4 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 0 | 1 | 7 | 7 | 5 | 7 | |
| | 8 | 3 | 0 | 3 | 1 | 3 | 6 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 0 | 7 | 3 | 0 | 0 | 3 |
| | 5 | 9 | 7 | 2 | 2 | 1 | 0 | 1 | 2 | 4 | 8 | 2 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 9 | 6 | 1 | 2 | 8 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*** TOTALS**

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Intestine Large, Colon | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Duodenum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Intestine Small, Ileum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Intestine Small, Jejunum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | X | X | X | X | X | X | | | | | | | | | | X | X | X | | | | | 18 |
| Mesentery | + | | + | + | | | | | | | | | | | | | + | + | | | + | | | 14 |
| Oral Mucosa | | + | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 4 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 0 | 1 | 7 | 7 | 5 | 7 | |
| | 8 | 3 | 0 | 3 | 1 | 3 | 6 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 0 | 7 | 3 | 0 | 0 | 3 | |
| | 5 | 9 | 7 | 2 | 2 | 1 | 0 | 1 | 2 | 4 | 8 | 2 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 9 | 6 | 1 | 2 | 8 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*** TOTALS**

Stomach, Forestomach

+ 50

Stomach, Glandular

+ 49

Leukemia Mononuclear

X

1

CARDIOVASCULAR SYSTEM

Heart

+ 50

Leukemia Mononuclear

X

1

ENDOCRINE SYSTEM

Adrenal Cortex

+ 50

Adenoma

X

2

Adrenal Medulla

A + 49

Leukemia Mononuclear

X X

2

Pheochromocytoma Benign

1

Islets, Pancreatic

+ 50

Adenoma

X

3

Parathyroid Gland

+ M

43

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 5 | 4 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 0 | 1 | 7 | 7 | 5 | 7 | |
| | 8 | 3 | 0 | 3 | 1 | 3 | 6 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 0 | 7 | 3 | 0 | 0 | 3 |
| | 5 | 9 | 7 | 2 | 2 | 1 | 0 | 1 | 2 | 4 | 8 | 2 | 1 | 1 | 1 | 2 | 0 | 1 | 9 | 6 | 1 | 2 | 8 | 0 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 35 |
| Leukemia Mononuclear | | | | | | | | | | | | | | X | | | | | | | | | | 2 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C-cell, Adenoma | X | | | | | | | | | | | | | | | | | | | | | | | 2 |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma | X | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Fibrosarcoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Granulosa Cell Tumor Malignant | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| Serosa, Hemangioma | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 4 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 0 | 1 | 7 | 7 | 5 | 7 | |
| | 8 | 3 | 0 | 3 | 1 | 3 | 6 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 0 | 7 | 3 | 0 | 3 | |
| | 5 | 9 | 7 | 2 | 2 | 1 | 0 | 1 | 2 | 4 | 8 | 2 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 9 | 6 | 1 | 2 | 8 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*** TOTALS**

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | | | | | | | | | | | | | | + | | | | | | | 2 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | X | | | | | | | 2 |
| Lymph Node, Bronchial | M | + | M | M | M | M | M | M | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | 4 |
| Leukemia Mononuclear | | | | | | | | | | | | X | | | | | | | | | | | | 1 |
| Lymph Node, Mandibular | M | M | M | M | + | M | M | M | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | 3 |
| Leukemia Mononuclear | | | | | | | | | | | | X | | | | | | | | | | | | 1 |
| Lymph Node, Mediastinal | + | M | + | M | + | M | + | + | M | M | + | + | + | + | + | M | M | + | M | + | M | M | M | 26 |
| Leukemia Mononuclear | | | | | | | | | | | X | | | | | | X | | | | | | | 6 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | X | | | | | | X | | | | | | | 5 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | X | | | | | | X | | | | | | | 18 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | X | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 4 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 0 | 1 | 7 | 7 | 5 | 7 | |
| | 8 | 3 | 0 | 3 | 1 | 3 | 6 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 0 | 7 | 3 | 0 | 3 | |
| | 5 | 9 | 7 | 2 | 2 | 1 | 0 | 1 | 2 | 4 | 8 | 2 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 9 | 6 | 1 | 2 | 8 | 0 |
| FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONTROL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

*** TOTALS**

Thymoma Benign

1

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Multiple | | | | | | | | | | | | | | | | X | | | | | | | | 2 |
| Fibroadenoma | | | X | X | | | X | X | | | X | | | | | | | | | | | | | 14 |
| Fibroadenoma, Multiple | | | | | X | X | | | | | | | | | | | | X | | | | | | 8 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | | | | | | | | | | 1 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Rhabdomyosarcoma | | | X | | | | | | | | | | | | | | | | | | | | | 1 |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Astrocytoma Malignant | | | | | | | | | | | | | | | X | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|
| | 5 | 4 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 0 | 1 | 7 | 7 | 5 | 7 | | |
| | 8 | 3 | 0 | 3 | 1 | 3 | 6 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 0 | 7 | 3 | 0 | 0 | 3 | |
| | 5 | 9 | 7 | 2 | 2 | 1 | 0 | 1 | 2 | 4 | 8 | 2 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 9 | 6 | 1 | 2 | 8 | 0 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| CONTROL | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |

Glioma Malignant

1

Leukemia Mononuclear

1

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | X | | | X | | | X | | | | | | | | | X | | | | | | 7 |
| Nose | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Pleura | | | | + | + | + | | | | + | + | + | + | + | | | | + | + | | | | | 16 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

URINARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
| .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| | 5 | 4 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 0 | 1 | 7 | 7 | 5 | 7 | |
| | 8 | 3 | 0 | 3 | 1 | 3 | 6 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 0 | 7 | 3 | 0 | 3 | |
| | 5 | 9 | 7 | 2 | 2 | 1 | 0 | 1 | 2 | 4 | 8 | 2 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 9 | 6 | 1 | 2 | 8 | |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| CONTROL | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |
| Kidney | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Leukemia Mononuclear | | | | | | | X | X | | X | | | | | | | | | | | | | | | 4 |
| Ureter | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | X | X | X | X | X | | | | | | | | | | | | | | | 18 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 7 | 7 | 4 | 5 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 6 | |
| DAY ON TEST | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 8 | 3 | 3 | 3 | 1 | 6 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 4 | 3 | 3 | 6 | 3 | 6 |
| | 2 | 7 | 2 | 2 | 5 | 7 | 8 | 2 | 2 | 1 | 0 | 0 | 1 | 2 | 1 | 1 | 5 | 1 | 9 | 2 | 1 | 2 | 1 | 2 | 3 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 100 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females
(cont...)

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | + | + | A | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | + | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Duodenum | + | + | + | + | A | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | + | + | + | + | A | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Jejunum | + | + | + | + | A | + | A | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | X | X | X | | X | | X | | | | | | | | X | X | | | X | | X | | | | | |
| Mesentery | + | + | | | | | | + | + | | | | | | + | + | + | + | + | + | + | + | + | + | + | + |
| Sarcoma Stromal, Metastatic, Uterus | | | | | | | | X | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

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Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

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First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|--|
| | 7
3
2 | 5
3
7 | 7
3
2 | 7
3
2 | 4
3
5 | 5
5
7 | 6
8
2 | 7
3
2 | 7
3
1 | 6
6
0 | 7
3
0 | 7
3
1 | 7
3
2 | 7
3
1 | 7
3
1 | 6
4
1 | 6
4
5 | 7
3
1 | 7
3
1 | 5
3
9 | 7
3
2 | 5
3
1 | 7
3
2 | 6
3
2 | | |
| FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 0
0
0 | | |
| | 0
3
0 | 0
3
3 | | |
| | 1
0 | 2
0 | 3
0 | 4
0 | 5
0 | 6
0 | 7
0 | 8
0 | 9
0 | 1
1 | 2
2 | 2
2 | 2
2 | 2
2 | 2
2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 PPM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| females (cont...) | | | | | | | | | | | | | | | | | | | | | | | | | | |

Stomach, Forestomach

+ +

Stomach, Glandular

+ +

Tongue

.....

CARDIOVASCULAR SYSTEM

Blood Vessel

+

Heart

+ +

Pericardium, Histiocytic Sarcoma

.....

ENDOCRINE SYSTEM

Adrenal Cortex

+ +

Adrenal Medulla

+ +

Leukemia Mononuclear

X

Pheochromocytoma Malignant

.....

Islets, Pancreatic

+ +

Parathyroid Gland

+ +

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 7 | 5 | 7 | 7 | 4 | 5 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 6 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 8 | 3 | 3 | 3 | 1 | 6 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 4 | 3 | 3 | 6 | 3 |
| | 2 | 7 | 2 | 2 | 5 | 7 | 8 | 2 | 2 | 1 | 0 | 0 | 1 | 2 | 1 | 1 | 5 | 1 | 9 | 2 | 1 | 2 | 1 | 2 | 3 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

**females
(cont...)**

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | X | | X | | X | | X | | X | | X | | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Follicular Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Granulosa Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | | | | |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Polyp Stromal | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 7 | 7 | 4 | 5 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 6 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 8 | 3 | 3 | 3 | 1 | 6 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 4 | 3 | 3 | 6 | 3 |
| | 2 | 7 | 2 | 2 | 5 | 7 | 8 | 2 | 2 | 1 | 0 | 0 | 1 | 2 | 1 | 1 | 5 | 1 | 9 | 2 | 1 | 2 | 1 | 2 | 3 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

Polyp Stromal, Multiple

Sarcoma Stromal

X

Vagina

HEMATOPOIETIC SYSTEM

Bone Marrow

+ +

Lymph Node

+

Deep Cervical, Carcinoma, Metastatic,
Thyroid Gland

X

Deep Cervical, Leukemia Mononuclear

Pancreatic, Leukemia Mononuclear

Lymph Node, Bronchial

M M M + M M M M M M M M + M M M M M M M M M M + M M

Leukemia Mononuclear

X

Lymph Node, Mandibular

M M

Lymph Node, Mediastinal

M M M + M M + M M + M M + M + M + + + M I M M M +

Leukemia Mononuclear

X

X

Lymph Node, Mesenteric

+ +

Leukemia Mononuclear

X

X

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

TDMS No. 88006 - 03

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 7 | 7 | 4 | 5 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 6 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 8 | 3 | 3 | 3 | 1 | 6 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 4 | 3 | 3 | 6 | 3 |
| | 2 | 7 | 2 | 2 | 5 | 7 | 8 | 2 | 2 | 1 | 0 | 0 | 1 | 2 | 1 | 1 | 5 | 1 | 9 | 2 | 1 | 2 | 1 | 2 | 3 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | X | X | X | | X | | X | | X | | X | | X | | X | | X | | X | | X | | X | | | |
| Thymus | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Leukemia Mononuclear | | | | | | | X | | | | | | | | | | | | | | | | | | | |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carcinoma | | | | | | | | X | | | | | | | | | | | | | | | | | | |
| Fibroadenoma | X | | | | | | | | | | | | | | | X | X | X | X | X | X | X | X | X | | |
| Fibroadenoma, Multiple | | X | | | | | X | | | X | | | | | | | | | X | X | X | | | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Keratoacanthoma | | X | | | | | | | | | | | | | | | | | X | | | | | | | |
| Subcutaneous Tissue, Fibrosarcoma | | | | | | | X | | | | | | | | | | | | | | | | | | | |
| Subcutaneous Tissue, Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 5 | 7 | 7 | 4 | 5 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 6 | |
| DAY ON TEST | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 8 | 3 | 3 | 3 | 1 | 6 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 4 | 3 | 3 | 6 | 3 | 6 |
| | 2 | 7 | 2 | 2 | 5 | 7 | 8 | 2 | 2 | 1 | 0 | 0 | 1 | 2 | 1 | 1 | 5 | 1 | 9 | 2 | 1 | 2 | 1 | 2 | 3 | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 100 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females
(cont...)

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

Carcinoma, Metastatic, Pituitary Gland

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | X | | | | | | |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mediastinum, Sarcoma Stromal, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | |
|---|-------------|---|
| FISCHER 344 RATS FEMALE
ANIMAL ID
100 PPM | DAY ON TEST | 7 5 7 7 4 5 6 7 7 7 6 6 7 7 7 7 7 7 6 6 7 7 5 7 6 |
| | | 3 \| 3 \| 3 \| 3 \| 3 \| 5 \| 8 \| 3 \| 3 \| 3 \| 1 \| 6 \| 3 \| 3 \| 2 \| 3 \| 1 \| 3 \| 4 \| 4 \| 3 \| 3 \| 6 \| 3 \| 6 |
| | | 2 \| 7 \| 2 \| 2 \| 5 \| 7 \| 8 \| 2 \| 2 \| 1 \| 0 \| 0 \| 1 \| 2 \| 1 \| 1 \| 5 \| 1 \| 9 \| 2 \| 1 \| 2 \| 1 \| 2 3 |

| | | |
|-------|---|----------------------|
| | 0 0 | females
(cont...) |
| | 0 0 | |
| | 3 3 | |
| | 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 | |
| | 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | |

Leukemia Mononuclear

Pleura

+ +

Trachea

+ +

SPECIAL SENSES SYSTEM

Eye

+ +

Harderian Gland

+ +

URINARY SYSTEM

Kidney

+ +

Leukemia Mononuclear

X X

Urinary Bladder

+ +

Transitional Epithelium, Carcinoma

X

SYSTEMIC LESIONS

Multiple Organ

+ +

Histiocytic Sarcoma

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 7 | 5 | 7 | 7 | 4 | 5 | 6 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 5 | 7 | 6 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 8 | 3 | 3 | 3 | 1 | 6 | 3 | 3 | 2 | 3 | 1 | 3 | 4 | 4 | 3 | 3 | 3 | 6 |
| | 2 | 7 | 2 | 2 | 5 | 7 | 8 | 2 | 2 | 1 | 0 | 0 | 1 | 2 | 1 | 1 | 5 | 1 | 9 | 2 | 1 | 2 | 1 | 2 | 3 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100 PPM | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 2 2 2 2 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 | | | | | | | | | | | | | | | | | | | | | | | | | |

Leukemia Mononuclear

X X

females
(cont...)

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

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TDMS No. 88006 - 03

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Route: RESPIRATORY EXPOSURE WHOLE BODY

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| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| | 7 | 7 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 4 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 6 | |
| | 3 | 3 | 3 | 3 | 5 | 9 | 3 | 8 | 9 | 9 | 8 | 3 | 3 | 1 | 3 | 6 | 3 | 2 | 3 | 3 | 0 | 8 | 2 | 3 | 0 | |
| | 2 | 1 | 2 | 2 | 2 | 0 | 2 | 3 | 4 | 5 | 4 | 0 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 4 | 2 | 1 | 7 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 100 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Liver | + | + | + | + | + | + | + | + | + | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 21 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mesentery | + | | | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma Stromal, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

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First Dose M/F: 08/06/01 / 08/06/01

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| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| FISCHER 344 RATS FEMALE
100 PPM | ANIMAL ID | 7 | 7 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 4 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 6 | | |
| | | 3 | 3 | 3 | 3 | 5 | 9 | 3 | 8 | 9 | 9 | 8 | 3 | 3 | 1 | 3 | 6 | 3 | 2 | 3 | 3 | 0 | 8 | 2 | 3 | 0 |
| | | 2 | 1 | 2 | 2 | 2 | 0 | 2 | 3 | 4 | 5 | 4 | 0 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 4 | 2 | 1 | 7 | 0 |
| ..... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | * TOTALS | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | ..... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pericardium, Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | ..... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 50 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

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TDMS No. 88006 - 03

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Route: RESPIRATORY EXPOSURE WHOLE BODY

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| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|---|
| | 7 | 7 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 4 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 6 | |
| | 3 | 3 | 3 | 3 | 5 | 9 | 3 | 8 | 9 | 9 | 8 | 3 | 3 | 1 | 3 | 6 | 3 | 2 | 3 | 3 | 0 | 8 | 2 | 3 | 0 | |
| | 2 | 1 | 2 | 2 | 2 | 0 | 2 | 3 | 4 | 5 | 4 | 0 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 4 | 2 | 1 | 7 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 100 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma | X | X | X | X | | X | X | | | | | X | | X | X | X | X | X | X | X | X | X | X | X | 29 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| C-cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Follicular Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Granulosa Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Polyp Stromal | X | | X | | X | | | | | | | | | | | | | | | | | | | X | 13 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 7 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 4 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 6 | |
| | 3 | 3 | 3 | 3 | 5 | 9 | 3 | 8 | 9 | 9 | 8 | 3 | 3 | 1 | 3 | 6 | 3 | 2 | 3 | 3 | 0 | 8 | 2 | 3 | 0 |
| | 2 | 1 | 2 | 2 | 2 | 0 | 2 | 3 | 4 | 5 | 4 | 0 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 4 | 2 | 1 | 7 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

Polyp Stromal, Multiple

X

1

Sarcoma Stromal

1

Vagina

+ 1

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Deep Cervical, Carcinoma, Metastatic,
Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Deep Cervical, Leukemia Mononuclear | | | | | | | | | | | | | | | X | | | | | | | | | | 1 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | X | X | | | | | | | | 2 | |
| Lymph Node, Bronchial
Leukemia Mononuclear | + | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 7 |
| | | | | | | | | | | | | | | | X | | | | | | | | | | 2 |
| Lymph Node, Mandibular | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 0 |
| Lymph Node, Mediastinal
Leukemia Mononuclear | + | + | + | + | + | + | + | + | + | + | + | + | + | M | M | M | M | M | M | M | M | M | M | M | 25 |
| | | | | | | | | | | | | | | X | X | | X | X | | | | | | 8 | |
| Lymph Node, Mesenteric
Leukemia Mononuclear | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| | | | | | | | | | | | | | | | X | X | X | | | | | | | 9 | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 7 | 7 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 4 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 6 | |
| | 3 | 3 | 3 | 3 | 5 | 9 | 3 | 8 | 9 | 9 | 8 | 3 | 3 | 1 | 3 | 6 | 3 | 2 | 3 | 3 | 0 | 8 | 2 | 3 | 0 | |
| | 2 | 1 | 2 | 2 | 2 | 0 | 2 | 3 | 4 | 5 | 4 | 0 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 4 | 2 | 1 | 7 | 0 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 100 PPM | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | X | | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 21 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | X | | | | 1 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | | X | | | | | 1 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | X | | | | | 2 |
| Fibroadenoma | X | X | | X | X | X | | | | | | | | | | | X | | | X | | X | X | X | 16 |
| Fibroadenoma, Multiple | | | X | | | | X | X | | X | X | | | | | X | X | | X | X | X | X | X | 14 | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | X | | | | | | | | 1 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Subcutaneous Tissue, Fibrosarcoma | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Subcutaneous Tissue, Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | X | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
| .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 7 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 4 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 6 | |
| | 3 | 3 | 3 | 3 | 5 | 9 | 3 | 8 | 9 | 9 | 8 | 3 | 3 | 1 | 3 | 6 | 3 | 2 | 3 | 3 | 0 | 8 | 2 | 3 | 0 |
| | 2 | 1 | 2 | 2 | 2 | 0 | 2 | 3 | 4 | 5 | 4 | 0 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 4 | 2 | 1 | 7 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | + | 1 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Carcinoma, Metastatic, Pituitary Gland | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Carcinoma, Metastatic, Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Histiocytic Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Leukemia Mononuclear | X | X | | | | | | | | | | | | | | | | | | | | | | | X | 13 |
| Mediastinum, Sarcoma Stromal, Metastatic, Uterus | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | 49 | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

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Route: RESPIRATORY EXPOSURE WHOLE BODY

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 4 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 6 | |
| DAY ON TEST | 3 | 3 | 3 | 3 | 5 | 9 | 3 | 8 | 9 | 9 | 8 | 3 | 3 | 1 | 3 | 6 | 3 | 2 | 3 | 3 | 0 | 8 | 2 | 3 | 0 | |
| | 2 | 1 | 2 | 2 | 2 | 0 | 2 | 3 | 4 | 5 | 4 | 0 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 4 | 2 | 1 | 7 | 0 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 PPM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |

| | | |
|----------------------|---|---|
| Leukemia Mononuclear | X | 1 |
|----------------------|---|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Pleura | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 13 |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | |
|----------------------|---|---|
| Leukemia Mononuclear | X | 3 |
|----------------------|---|---|

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | |
|------------------------------------|--|---|
| Transitional Epithelium, Carcinoma | | 1 |
|------------------------------------|--|---|

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

| | | |
|---------------------|---|---|
| Histiocytic Sarcoma | X | 1 |
|---------------------|---|---|

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

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ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

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Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 7 | 7 | 7 | 6 | 5 | 7 | 6 | 6 | 4 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 6 | 5 | 6 |
|--|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 3 | 3 | 3 | 5 | 9 | 3 | 8 | 9 | 9 | 8 | 3 | 3 | 1 | 3 | 6 | 3 | 2 | 3 | 3 | 0 | 8 | 2 | 3 | 0 |
| | 2 | 1 | 2 | 2 | 2 | 0 | 2 | 3 | 4 | 5 | 4 | 0 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 4 | 2 | 1 | 7 | 0 |
| FISCHER 344 RATS FEMALE
ANIMAL ID
100 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | |

Leukemia Mononuclear

X X

21

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

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| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | |
| DAY ON TEST | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 |
| | 2 | 2 | 2 | 1 | 7 | 6 | 2 | 1 | 1 | 2 | 1 | 3 | 1 | 1 | 2 | 4 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 9 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

ALIMENTARY SYSTEM

Esophagus

+ +

Intestine Large, Cecum

+ +

Intestine Large, Colon

+ +

Intestine Large, Rectum

+ +

Intestine Small, Duodenum

+ +

Intestine Small, Ileum

+ +

Intestine Small, Jejunum

+ +

Liver

+ +

Leukemia Mononuclear

X X

Mesentery

+ +

Leukemia Mononuclear

+ +

Oral Mucosa

+ +

Pharyngeal, Squamous Cell Papilloma

+ +

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | |
| DAY ON TEST | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 |
| | 2 | 2 | 2 | 1 | 7 | 6 | 2 | 1 | 1 | 2 | 1 | 3 | 1 | 1 | 2 | 4 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 9 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tongue | | | | | | | + | | | | | | | | | | | | | | | | | | |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | X | | | | | | | |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | |
|-------------------------|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| FISCHER 344 RATS FEMALE | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 | |
| ANIMAL ID | 2 | 2 | 2 | 1 | 7 | 6 | 2 | 1 | 1 | 2 | 1 | 3 | 1 | 1 | 2 | 4 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 9 | |
| 300 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | |
| | females
(cont...) | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | M | + | + | + | M | M | + | + | + | + | + | + | + | M | + | + | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | |

Ovary

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Uterus | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

I .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

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First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | |
| DAY ON TEST | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 |
| | 2 | 2 | 2 | 1 | 7 | 6 | 2 | 1 | 1 | 2 | 1 | 3 | 1 | 1 | 2 | 4 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 9 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

Leukemia Mononuclear

Polyp Stromal

X X

X X X

HEMATOPOIETIC SYSTEM

Bone Marrow

+ +

Lymph Node

+

Pancreatic, Leukemia Mononuclear

Thoracic, Leukemia Mononuclear

Lymph Node, Bronchial

M M M M + M M M M M M M M M M M M M M M M + M M M M M M M

Leukemia Mononuclear

Lymph Node, Mandibular

M M

Leukemia Mononuclear

Lymph Node, Mediastinal

+ M + M + + + + M + + + M M M M M M M M M M M M M M M M + +

Leukemia Mononuclear

X X

Lymph Node, Mesenteric

+ +

Leukemia Mononuclear

X

Spleen

+ +

Leukemia Mononuclear

X X

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | |
| DAY ON TEST | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 |
| | 2 | 2 | 2 | 1 | 7 | 6 | 2 | 1 | 1 | 2 | 1 | 3 | 1 | 1 | 2 | 4 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 9 | 1 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | X | | | X | | | X | | | | | | | X | X | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Pleura | + | + | + | | | | | + | + | | | + | + | | | | | | | | | | | | + |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

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ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 7 | 7 | 7 | 7 | 6 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 8 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 | |
| | 2 | 2 | 2 | 1 | 7 | 6 | 2 | 1 | 1 | 2 | 1 | 3 | 1 | 1 | 2 | 4 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 9 | 1 |
| FISCHER 344 RATS FEMALE
ANIMAL ID
300 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

Leukemia Mononuclear

X X X

Urinary Bladder

+ +

Leukemia Mononuclear

SYSTEMIC LESIONS

Multiple Organ

+ +

Leukemia Mononuclear

X X

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

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| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 4 |
| | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 0 | 0 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 9 | 3 | 7 | 3 | 3 | 7 |
| | 1 | 0 | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 5 | 6 | 2 | 1 | 1 | 6 | 1 | 1 | 2 | 1 | 5 | 1 | 7 | 2 | 2 | 2 | 7 |
| FISCHER 344 RATS FEMALE | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Cecum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Small, Duodenum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Intestine Small, Ileum | + | A | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Intestine Small, Jejunum | + | A | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 20 | |
| Mesentery | + | | + | | + | | | | | | | | | | | | | | | | | | | | | 12 |
| Leukemia Mononuclear | | | | | | | | | X | | | | | | | | | | | | | | | | | 1 |
| Oral Mucosa | + | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pharyngeal, Squamous Cell Papilloma | X | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

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ALPHA-METHYLSTYRENE

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| DAY ON TEST | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 4 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 3 | 0 | 3 | 3 | 3 | 3 | 6 | 3 | 0 | 0 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 9 | 3 | 7 | 3 | 3 | 3 | 7 |
| | 1 | 0 | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 5 | 6 | 2 | 1 | 1 | 1 | 6 | 1 | 1 | 2 | 1 | 5 | 1 | 7 | 2 | 2 | 2 | 7 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Tongue | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |

CARDIOVASCULAR SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

ENDOCRINE SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 5 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----------|
| FISCHER 344 RATS FEMALE
300 PPM | ANIMAL ID | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 4 |
| | | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 0 | 0 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 9 | 3 | 7 | 3 | 3 | 3 | 7 |
| | | 1 | 0 | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 5 | 6 | 2 | 1 | 1 | 1 | 6 | 1 | 1 | 2 | 1 | 5 | 1 | 7 | 2 | 2 | 2 | 7 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | X | | | | 1 | |
| Carcinoma | | X | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Parathyroid Gland | | + | + | + | + | + | + | + | M | + | + | M | + | + | M | + | + | + | + | + | + | + | + | + | + | + | 43 | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Adenoma | | X | X | X | | X | | | X | X | X | X | | X | | X | | X | X | X | X | X | X | X | X | X | 37 | |
| Leukemia Mononuclear | | | | | | X | | | | | | | | | | | | | | | | | | | | | 2 | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| C-cell, Adenoma | | X | | | | | | | | | | | | | | | X | X | | | | | | | | | 4 | |

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

Clitoral Gland

Carcinoma

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 |

Ovary

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Uterus

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|--|
| + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 4 |
| | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 0 | 0 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 9 | 3 | 7 | 3 | 3 | 7 |
| | 1 | 0 | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 5 | 6 | 2 | 1 | 1 | 6 | 1 | 1 | 2 | 1 | 5 | 1 | 7 | 2 | 2 | 2 | 7 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE
300 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * TOTALS |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |

HEMATOPOIETIC SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Pancreatic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Thoracic, Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Bronchial | M | M | + | M | M | + | + | M | + | M | M | M | M | M | + | M | + | M | M | M | M | M | M | M | 8 | |
| Leukemia Mononuclear | | | | | | | | X | X | X | | | | | | X | X | | | | | | | | 5 | |
| Lymph Node, Mandibular | M | M | M | M | M | M | + | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | 1 | |
| Leukemia Mononuclear | | | | | | | | X | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mediastinal | M | M | + | + | + | + | + | M | M | M | + | M | M | M | + | M | M | M | M | M | M | M | M | M | 21 | |
| Leukemia Mononuclear | | | | | | | | X | X | X | | | | | | X | X | | | | | | | | 9 | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | X | X | X | | | | | | X | X | | | | | | | | 8 | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 21 | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

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Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

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| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 4 |
| | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 0 | 0 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 9 | 3 | 7 | 3 | 3 | 7 |
| | 1 | 0 | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 5 | 6 | 2 | 1 | 1 | 6 | 1 | 1 | 2 | 1 | 5 | 1 | 7 | 2 | 2 | 2 | 7 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 300 PPM | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | 48 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | X | | | | | | | 1 |

INTEGUMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | X | | | | | | | 3 |
| Carcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Fibroadenoma | | | | | X | X | | | | | X | | | X | X | | X | X | X | | | | | | | 16 | |
| Fibroadenoma, Multiple | | X | | | | X | | | | | | | | | | | | | | X | | | | | | | 7 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Basal Cell Carcinoma | | | | | | | | | | | | | | | | | | | | X | | | | | | | 1 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Subcutaneous Tissue, Leukemia Mononuclear | | | | | | | | | | | | X | | | | | | | | | | | | | | | 1 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

NERVOUS SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor
+ .. Tissue examined microscopically
x .. Lesion present
| .. Insufficient tissue

M .. Missing tissue
A .. Autolysis precludes evaluation
BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

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| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 4 |
| | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 0 | 0 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 9 | 3 | 7 | 3 | 3 | 7 |
| | 1 | 0 | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 5 | 6 | 2 | 1 | 1 | 6 | 1 | 1 | 2 | 1 | 5 | 1 | 7 | 2 | 2 | 2 | 7 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | X | X | | X | | X | X | | X | | X | | X | | X | | X | | X | | X | 14 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pleura | + | + | + | | | | | | | | | | | | | | | | | | | | | | | 15 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

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Route: RESPIRATORY EXPOSURE WHOLE BODY

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| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 7 | 6 | 7 | 7 | 7 | 7 | 5 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 4 | 7 | 6 | 7 | 7 | 7 | 4 |
| | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 0 | 0 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 9 | 3 | 7 | 3 | 3 | 3 | 7 |
| | 1 | 0 | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 5 | 6 | 2 | 1 | 1 | 6 | 1 | 1 | 2 | 1 | 5 | 1 | 7 | 2 | 2 | 2 | 7 |
| | ----- | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 300 PPM | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Leukemia Mononuclear | X | X | X | X | | | | | | | | | | | | | | | | | | | | | | 8 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | X | | | | | | | | | | | | | | | | | 1 | |

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 21 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 5 | 5 | 7 | 5 | 6 | 7 | 4 | 6 | 6 | 7 | 7 | 5 | 6 | 5 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 6 |
| | 3 | 3 | 8 | 0 | 0 | 6 | 8 | 1 | 5 | 9 | 8 | 3 | 3 | 8 | 6 | 4 | 5 | 3 | 3 | 2 | 6 | 3 | 3 | 1 | 1 | 1 |
| | 1 | 2 | 1 | 9 | 2 | 9 | 7 | 8 | 8 | 0 | 8 | 1 | 2 | 5 | 8 | 3 | 2 | 1 | 2 | 2 | 8 | 1 | 1 | 0 | 9 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 1000 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | |

females
(cont...)

ALIMENTARY SYSTEM

Esophagus

+ +

Intestine Large, Cecum

+ + A +

Intestine Large, Colon

+ + A +

Intestine Large, Rectum

+ +

Serosa, Fibrosarcoma, Metastatic, Skin

X

Intestine Small, Duodenum

+ + A +

Intestine Small, Ileum

+ + A +

Intestine Small, Jejunum

+ + A +

Liver

+ +

Leukemia Mononuclear

X X

X

Mesentery

+ +

Pancreas

+ +

Salivary Glands

+ +

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 5 | 5 | 7 | 5 | 6 | 7 | 4 | 6 | 6 | 7 | 7 | 5 | 6 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 6 |
| | 3 | 3 | 8 | 0 | 0 | 6 | 8 | 1 | 5 | 9 | 8 | 3 | 3 | 8 | 6 | 4 | 5 | 3 | 3 | 2 | 6 | 3 | 3 | 1 | 1 |
| | 1 | 2 | 1 | 9 | 2 | 9 | 7 | 8 | 8 | 0 | 8 | 1 | 2 | 5 | 8 | 3 | 2 | 1 | 2 | 2 | 8 | 1 | 1 | 0 | 9 |
| DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

Stomach, Forestomach

+ +

Stomach, Glandular

+ +

CARDIOVASCULAR SYSTEM

Blood Vessel

+

Heart

+ +

Epicardium, Squamous Cell Carcinoma,
Metastatic, Lung**ENDOCRINE SYSTEM**

Adrenal Cortex

+ +

Adenoma

X

X

Bilateral, Adenoma

X

Adrenal Medulla

+ +

Leukemia Mononuclear

X

Pheochromocytoma Malignant

Islets, Pancreatic

+ +

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 5 | 5 | 7 | 5 | 6 | 7 | 4 | 6 | 6 | 7 | 7 | 5 | 6 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 6 |
| | 3 | 3 | 8 | 0 | 0 | 6 | 8 | 1 | 5 | 9 | 8 | 3 | 3 | 8 | 6 | 4 | 5 | 3 | 3 | 2 | 6 | 3 | 3 | 1 | 1 |
| | 1 | 2 | 1 | 9 | 2 | 9 | 7 | 8 | 8 | 0 | 8 | 1 | 2 | 5 | 8 | 3 | 2 | 1 | 2 | 2 | 8 | 1 | 1 | 0 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | X | X | X | X | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| C-cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | X |

GENERAL BODY SYSTEM

| |
|------|
| NONE |
|------|

GENITAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Fibrosarcoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | | | | | | | X | X |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vagina | | | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R

Date Report Registered: 11/29/2005

Time Report Requested: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | 7 | 7 | 5 | 5 | 7 | 5 | 6 | 7 | 4 | 6 | 6 | 7 | 7 | 5 | 6 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 6 |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 3 | 3 | 8 | 0 | 0 | 6 | 8 | 1 | 5 | 9 | 8 | 3 | 3 | 8 | 6 | 4 | 5 | 3 | 3 | 2 | 6 | 3 | 3 | 1 | 1 |
| | 1 | 2 | 1 | 9 | 2 | 9 | 7 | 8 | 8 | 0 | 8 | 1 | 2 | 5 | 8 | 3 | 2 | 1 | 2 | 2 | 8 | 1 | 1 | 0 | 9 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

HEMATOPOIETIC SYSTEM

INTEGUMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

† ... Tissue examined microscopically

Lesion present

.. Lesion present
 Insufficient tissue

M .. Missing tissue

M .. Missing tissue
A .. Autolysis precludes evaluation

BLANK Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqsted: 11/29/2005

Time Report Reqsted: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 5 | 5 | 7 | 5 | 6 | 7 | 4 | 6 | 6 | 7 | 7 | 5 | 6 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 6 |
| | 3 | 3 | 8 | 0 | 0 | 6 | 8 | 1 | 5 | 9 | 8 | 3 | 3 | 8 | 6 | 4 | 5 | 3 | 3 | 2 | 6 | 3 | 3 | 1 | 1 |
| | 1 | 2 | 1 | 9 | 2 | 9 | 7 | 8 | 8 | 0 | 8 | 1 | 2 | 5 | 8 | 3 | 2 | 1 | 2 | 2 | 8 | 1 | 1 | 0 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Alveolar/Bronchiolar Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leukemia Mononuclear | X | | X | X | | X | | X | | | | | | | | | | | | | | | | X | |
| Squamous Cell Carcinoma, Metastatic,
Lung | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mediastinum, Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pleura | + | + | + | | + | + | + | | | | + | + | + | + | | | | + | | + | + | + | | | + |
| Squamous Cell Carcinoma, Metastatic,
Lung | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | | X |

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY ON TEST | 7 | 7 | 5 | 5 | 7 | 5 | 6 | 7 | 4 | 6 | 6 | 7 | 7 | 5 | 6 | 5 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 6 | 6 |
| | 3 | 3 | 8 | 0 | 0 | 6 | 8 | 1 | 5 | 9 | 8 | 3 | 3 | 8 | 6 | 4 | 5 | 3 | 3 | 2 | 6 | 3 | 3 | 1 | 1 |
| | 1 | 2 | 1 | 9 | 2 | 9 | 7 | 8 | 8 | 0 | 8 | 1 | 2 | 5 | 8 | 3 | 2 | 1 | 2 | 2 | 8 | 1 | 1 | 0 | 9 |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE
ANIMAL ID
1000 PPM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |

females
(cont...)

Urinary Bladder

+ +

SYSTEMIC LESIONS

Multiple Organ

+ +

Leukemia Mononuclear

X X

* .. Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

+ .. Tissue examined microscopically

A .. Autolysis precludes evaluation

x .. Lesion present

BLANK .. Not examined microscopically

| .. Insufficient tissue

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

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P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

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Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 |
| | 6 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 2 | 3 | 6 | 3 | 3 | 3 | 6 | 0 |
| | 8 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 4 | 1 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 3 | 2 | 0 | 2 | 1 | 2 | 2 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 1000 PPM | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

ALIMENTARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Serosa, Fibrosarcoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | A | 47 | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | 48 | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | X | X | X | | | | X | | X | | X | X | | | | | X | | X | X | | | | | 22 |
| Mesentery | + | + | + | | | | | | | | | | | | | | | | | | | | | 10 | |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 |
|--------------------------------|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | 6 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 2 | 3 | 6 | 3 | 3 | 3 | 6 | 0 |
| | 8 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 4 | 1 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 3 | 2 | 0 | 2 | 1 | 2 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | * TOTALS | | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 29 |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C-cell, Adenoma | X | | | | | | | | | | | | | | | | | | | | | | | 4 |
| GENERAL BODY SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | |
| GENITAL SYSTEM | | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Fibrosarcoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Polyp Stromal | X | | | | | | | | | | | | | | | | | | | | | | | 10 |
| Vagina | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R

Date Report Registered: 11/29/2005

Time Report Requested: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----------|---|---|---|
| DAY ON TEST | 6 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 3 | 2 | 3 | 6 | 3 | 3 | 2 | 3 | 6 | 3 | 3 | 2 | 3 | 6 | 0 |
| | 8 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 4 | 1 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 3 | 2 | 0 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | |
| <hr/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | * TOTALS | | | |

HEMATOPOIETIC SYSTEM

INTEGUMENTARY SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x Lesion present

x .. Lesion present
| Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------------|
| | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 |
| | 6 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 2 | 3 | 6 | 3 | 3 | 3 | 6 | 0 |
| | 8 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 4 | 1 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 3 | 2 | 0 | 2 | 1 | 2 | 2 |
| ..... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 1000 PPM | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | | | | | | | | | | | | | | | | * TOTALS |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Fibroadenoma | X | X | X | | | | | | | | | | | X | | X | | X | X | X | X | | | 18 |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | X | X | | | | | | | | 5 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Subcutaneous Tissue, Fibroma | | | | | | | | | | | | | | | X | | | | | | | | | 1 |
| Subcutaneous Tissue, Fibrosarcoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Subcutaneous Tissue, Hemangiosarcoma | | | | | | | | | | | | | | | | | | | | | | | | 1 |

MUSCULOSKELETAL SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Bone | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|

NERVOUS SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Brain | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|

RESPIRATORY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| Larynx | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R.

Date Report Reqstd: 11/29/2005

Time Report Reqstd: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

| DAY ON TEST | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 5 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 7 | 6 | 7 | 7 | 7 | 6 | 7 | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| | 6 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 2 | 3 | 6 | 3 | 3 | 3 | 6 | 0 |
| | 8 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 4 | 1 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 3 | 2 | 0 | 2 | 1 | 2 | 2 |
| FISCHER 344 RATS FEMALE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1000 PPM | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | |
| | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Alveolar/Bronchiolar Adenoma | | | | | | | | | X | | | | | | | | | | | | | | 1 | |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | | 12 |
| Squamous Cell Carcinoma, Metastatic,
Lung | | | | | | | | | | X | | | | | | | | | | | | | | 1 |
| Mediastinum, Squamous Cell Carcinoma | | | | | | | | | | | X | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pleura | + | + | + | + | + | + | + | + | + | | | | | | | | | | | | | | | 30 |
| Squamous Cell Carcinoma, Metastatic,
Lung | | | | | | | | | | X | | | | | | | | | | | | | | 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |

SPECIAL SENSES SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

URINARY SYSTEM

| | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | X | | | | | | | | | | | | | | | | | | | | | | 4 |

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

| .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

TDMS No. 88006 - 03

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

ALPHA-METHYLSTYRENE

CAS Number: 98-83-9

Pathologist: RENNE, R

Date Report Requested: 11/29/2005

Time Report Requested: 09:37:52

First Dose M/F: 08/06/01 / 08/06/01

Lab: BNW

Urinary Bladder

SYSTEMIC LESIONS

Multiple Organ

Leukemia Mononuclear

X X X X X X X X X X 22

*** END OF REPORT ***

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

x .. Lesion present

X .. Lesion present
| Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically